

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: P963525

Luminaire Tested: **NAV-SB3A-735-U-T4W-HSS**

Issue Date: 1/21/2025

**Test Information**

Test Method: LM-79-08  
Report Number: P963525  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-2)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/21/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NAV-SB3A-735-U-T4W-HSS  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(3) 70 CRI, 3500K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV WIDE  
OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 10626.2 lumens  
Efficiency: N/A  
Efficacy: 125.5 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B1 - U0 - G3

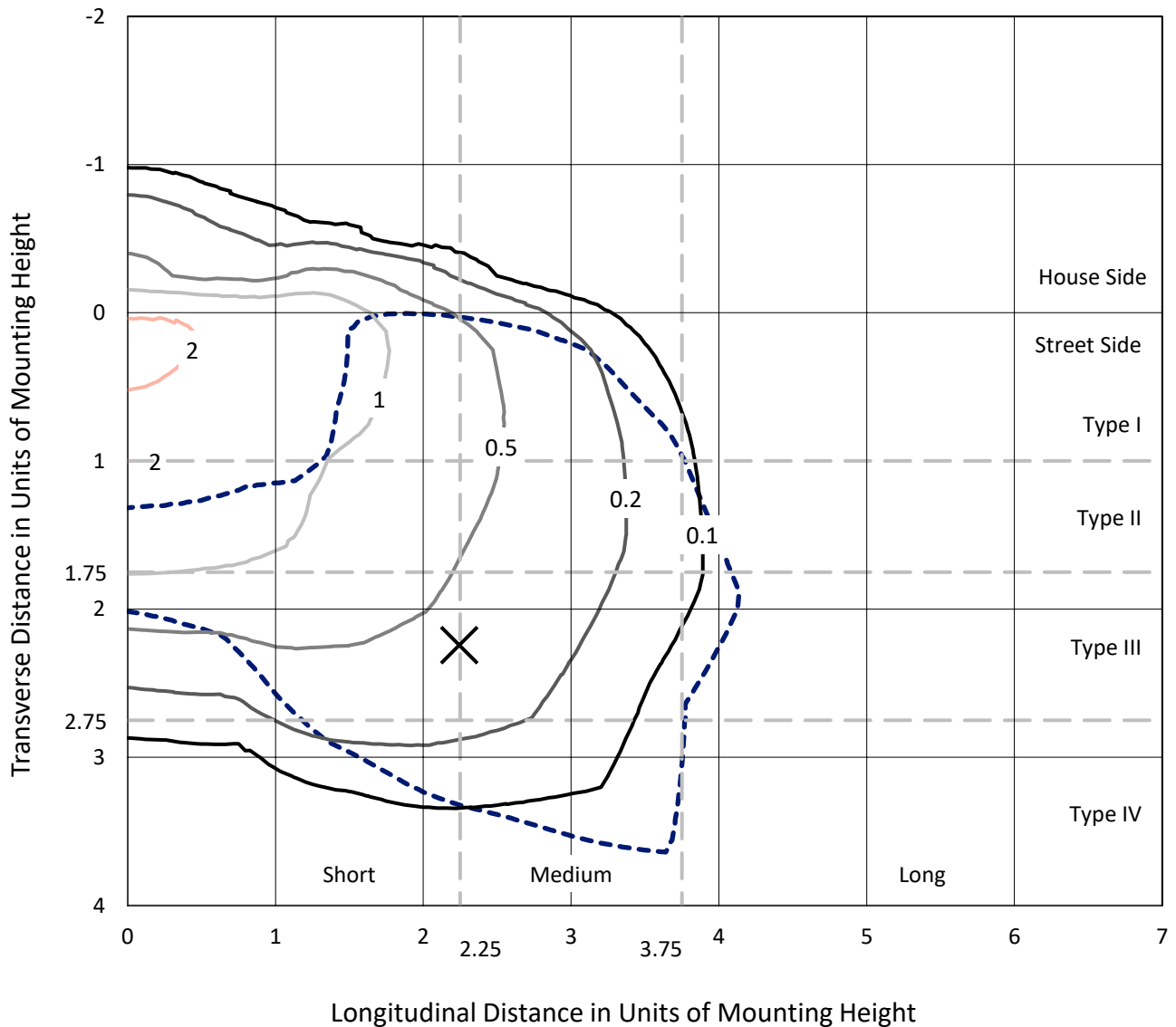
Input Watts (W): 84.7  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

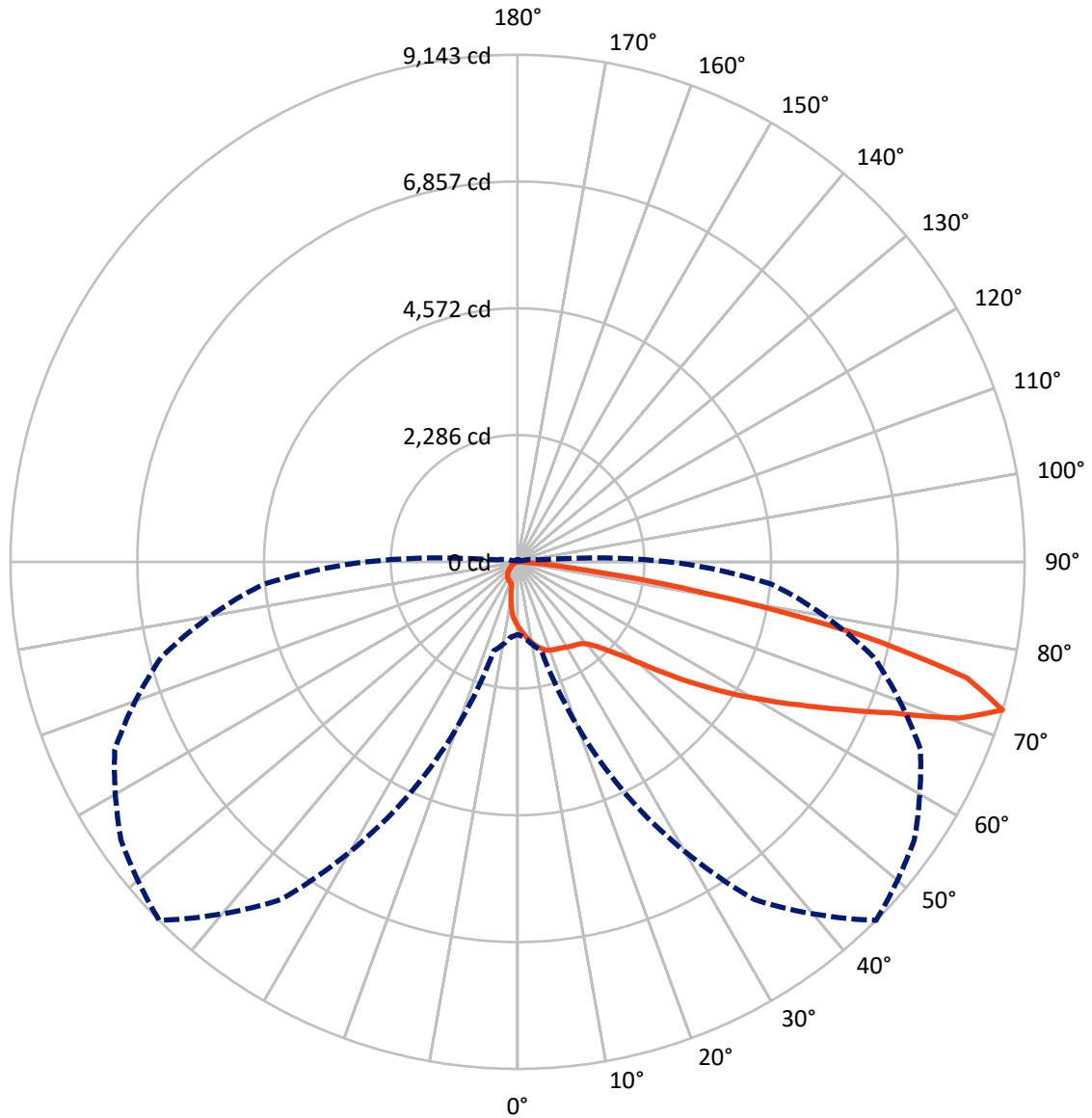
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.6 fc  
 Type IV - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral    - - - Horizontal Cone Through 72.5-Deg Vertical

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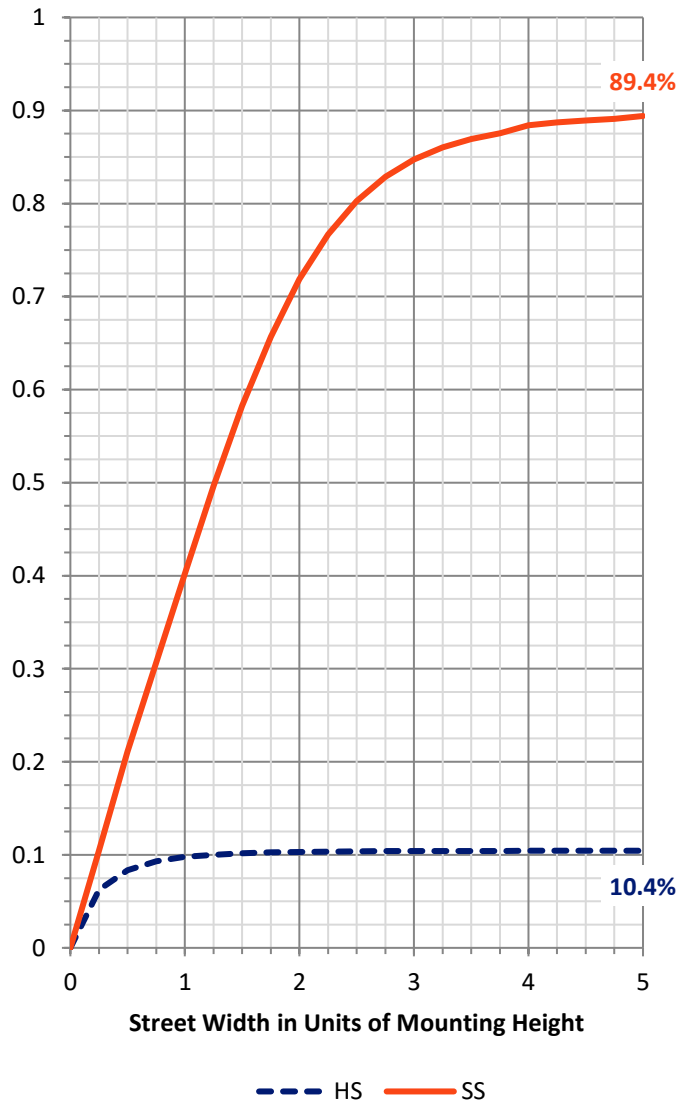
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1116.5	0.0	1116.5
	% Fixture	10.5	0.0	10.5
<b>Street Side</b>	Lumens	9509.7	0.0	9509.7
	% Fixture	89.5	0.0	89.5
<b>Total</b>	Lumens	10626.2	0.0	10626.2
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	109.7	1.0
10°-20°	320.6	3.0
20°-30°	526.4	5.0
30°-40°	746.6	7.0
40°-50°	1234.0	11.6
50°-60°	2216.7	20.9
60°-70°	3078.1	29.0
70°-80°	2232.7	21.0
80°-90°	161.4	1.5
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°	10626.2	100.0
0°-180°	10626.2	100.0

**Coefficient of Utilization**

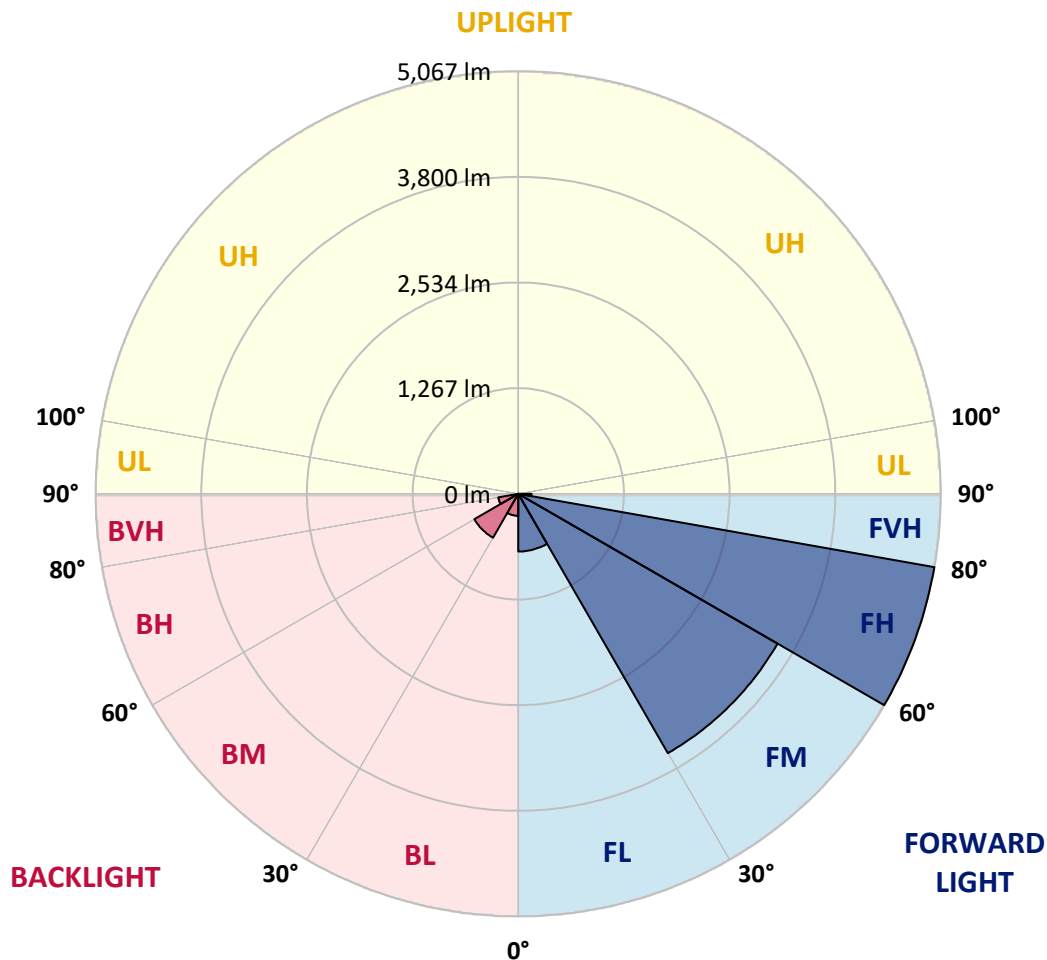


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	692.2	6.5			
FM (30°-60°)	3590.1	33.8			
FH (60°-80°)	5067.3	47.7			G3/7500
FVH (80°-90°)	160.1	1.5			G2/225
BL (0°-30°)	264.5	2.5	B1/500		
BM (30°-60°)	607.2	5.7	B1/1000		
BH (60°-80°)	243.5	2.3	B1/500		G1/500
BVH (80°-90°)	1.4	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-G3**  
 Type IV Short



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	1164.1	1164.1	1164.1	1164.1	1164.1	1164.1	1164.1	1164.1	1164.1	1164.1	1164.1
2.5°	1271.5	1273.7	1272.2	1263.5	1249.0	1241.0	1236.7	1222.1	1212.7	1196.1	1178.6
5°	1388.3	1397.0	1391.8	1374.4	1346.8	1327.3	1321.5	1291.8	1265.0	1233.8	1197.5
7.5°	1512.3	1516.6	1507.2	1484.7	1447.7	1414.4	1409.3	1368.0	1325.1	1277.3	1227.9
10°	1619.6	1624.7	1610.2	1577.6	1535.4	1494.1	1486.9	1441.1	1390.4	1331.7	1268.5
12.5°	1709.6	1714.6	1695.8	1656.6	1610.2	1567.4	1560.2	1512.3	1456.4	1391.1	1312.8
15°	1777.8	1787.2	1761.8	1719.7	1669.6	1626.9	1623.2	1576.1	1521.7	1449.1	1365.7
17.5°	1817.6	1827.1	1803.1	1752.3	1709.6	1673.3	1668.9	1629.7	1579.0	1509.4	1417.3
20°	1824.2	1832.9	1807.5	1763.2	1727.6	1698.6	1696.5	1668.2	1631.2	1564.5	1473.1
22.5°	1804.6	1815.5	1792.2	1756.7	1732.0	1716.8	1713.9	1697.9	1676.9	1620.3	1525.3
25°	1784.2	1792.9	1775.5	1744.3	1731.3	1729.9	1732.0	1729.2	1724.8	1676.9	1586.3
27.5°	1782.8	1792.2	1772.6	1742.9	1735.6	1750.9	1753.1	1766.9	1770.5	1728.5	1645.0
30°	1795.2	1801.6	1782.8	1751.6	1748.0	1782.8	1783.5	1808.2	1814.0	1771.9	1703.0
32.5°	1821.9	1829.2	1810.4	1764.6	1759.6	1808.2	1810.4	1843.1	1852.5	1818.4	1763.9
35°	1885.1	1893.8	1872.1	1800.9	1782.8	1832.1	1838.6	1877.1	1895.9	1867.7	1827.1
37.5°	2042.5	2017.1	1987.4	1874.2	1835.8	1869.8	1880.8	1925.7	1959.1	1926.4	1902.5
40°	2433.5	2353.6	2260.7	1999.0	1928.6	1950.4	1959.1	2004.0	2049.7	2017.8	2006.2
42.5°	3020.2	2925.9	2776.5	2286.2	2068.6	2079.4	2086.0	2125.1	2189.7	2164.3	2167.3
45°	3543.1	3509.1	3356.8	2776.5	2330.4	2276.7	2284.7	2305.0	2400.0	2390.6	2409.5
47.5°	3944.9	3925.3	3807.9	3339.3	2772.8	2518.2	2540.8	2550.2	2687.2	2720.7	2771.4
50°	4254.0	4246.7	4141.5	3839.8	3350.9	2874.4	2882.4	2862.1	3067.3	3150.0	3246.5
52.5°	4545.5	4570.2	4492.6	4304.7	3968.2	3340.8	3339.3	3243.6	3520.7	3645.4	3810.0
55°	4808.8	4817.5	4825.5	4779.1	4589.0	3871.7	3857.9	3701.3	4046.5	4175.6	4354.0
57.5°	5056.1	5059.7	5130.8	5225.9	5235.3	4441.8	4416.4	4228.5	4620.9	4713.1	4822.6
60°	5222.2	5238.9	5389.0	5653.1	5768.4	5030.0	5016.2	4824.8	5205.6	5248.3	5228.0
62.5°	4982.8	5084.4	5463.0	5986.7	6271.8	5682.1	5675.5	5495.6	5820.6	5785.8	5611.7
65°	4033.5	4205.4	4871.2	6212.2	6765.7	6410.2	6419.7	6228.2	6452.4	6339.2	5923.6
67.5°	2821.4	3002.7	3790.4	6230.4	7317.7	7265.4	7319.8	7019.5	7123.2	6869.4	5997.6
70°	1951.1	2044.7	2557.5	5840.1	7747.8	8443.3	8441.9	7991.4	7790.5	7110.9	5620.4
72.5°	1312.1	1360.7	1660.9	4633.3	7431.6	9143.2	9101.2	8734.1	8015.4	6650.3	4591.9
75°	553.4	589.0	768.9	2603.8	5879.4	8365.0	8251.1	7718.8	7121.8	5236.7	2865.0
77.5°	175.5	190.8	303.2	932.0	3238.5	6287.7	6167.3	4820.4	4773.2	2627.1	1047.3
80°	83.4	97.2	170.5	374.2	1274.4	3419.8	3403.1	2186.8	2053.4	709.4	210.3
82.5°	36.3	42.7	94.3	200.2	570.1	1220.0	1244.7	744.2	615.8	269.1	64.6
85°	11.6	15.3	43.6	92.1	240.8	303.2	299.5	177.0	248.0	146.5	22.4
87.5°	0.0	0.0	14.6	21.0	24.7	17.4	19.6	15.3	68.9	40.6	8.0
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°	1164.1	1164.1	1164.1	1164.1	1164.1	1164.1	1164.1	1164.1	1164.1	1164.1	1164.1
2.5°	1169.9	1158.4	1138.1	1119.2	1102.5	1085.8	1075.6	1061.1	1059.6	1059.6	1063.3
5°	1177.9	1159.1	1122.8	1084.3	1040.1	998.0	955.9	915.3	902.3	892.9	897.2
7.5°	1201.1	1171.4	1114.1	1040.8	956.6	864.6	800.0	730.4	703.6	689.0	691.3
10°	1234.5	1193.8	1106.8	978.5	842.0	716.6	624.5	549.1	520.1	507.7	507.7
12.5°	1271.5	1221.4	1093.8	900.9	716.6	566.4	476.5	441.7	437.4	437.4	437.4
15°	1315.7	1254.8	1071.3	809.4	585.3	448.2	416.4	417.8	422.1	425.1	425.1
17.5°	1361.4	1290.4	1035.8	707.1	469.2	403.2	404.0	406.2	409.8	412.7	412.7
20°	1410.7	1325.8	988.6	598.4	402.5	390.2	392.4	394.5	397.5	398.9	399.6
22.5°	1463.7	1359.3	932.7	491.8	380.1	379.4	380.1	382.2	385.9	385.9	387.3
25°	1520.3	1396.3	868.9	414.1	368.5	368.5	369.9	371.4	374.2	374.2	374.9
27.5°	1578.3	1430.3	801.4	373.5	358.3	357.6	357.6	359.8	361.2	361.9	362.6
30°	1642.0	1470.2	734.0	364.8	350.3	346.7	344.5	345.9	347.4	348.2	349.6
32.5°	1707.3	1508.6	673.8	368.5	342.3	335.8	328.6	327.1	327.1	330.0	332.2
35°	1779.9	1550.7	627.4	380.8	337.9	319.9	308.2	301.8	302.5	306.8	308.9
37.5°	1866.9	1601.5	593.3	391.7	335.1	301.8	282.9	274.9	269.8	274.9	273.5
40°	1980.8	1676.2	568.7	400.4	331.5	280.6	255.3	242.2	232.8	235.7	234.3
42.5°	2148.4	1793.6	559.2	401.1	323.5	256.0	227.0	209.6	195.9	196.6	193.6
45°	2383.3	1979.4	607.8	391.7	306.1	229.2	197.3	174.0	165.3	163.2	160.3
47.5°	2705.4	2249.9	720.3	372.1	280.6	203.1	168.3	148.7	142.2	138.6	136.3
50°	3136.9	2597.4	845.0	350.3	255.3	178.5	144.3	132.0	127.6	124.0	123.3
52.5°	3637.4	2949.8	947.2	328.6	229.9	156.6	129.1	121.9	118.2	115.3	114.6
55°	4096.5	3192.8	941.5	305.3	205.3	139.3	118.2	113.9	109.6	106.6	105.2
57.5°	4382.3	3226.9	776.1	279.9	177.0	125.5	108.0	105.2	100.1	96.5	95.7
60°	4513.6	3032.6	544.0	246.6	148.7	112.4	97.2	95.7	89.2	84.2	82.7
62.5°	4537.6	2671.4	362.6	205.3	124.0	100.1	86.3	84.2	75.4	66.7	62.4
65°	4440.3	2154.9	250.9	160.3	105.9	87.0	74.0	69.6	60.2	51.5	48.6
67.5°	4132.8	1513.0	174.8	115.3	89.9	68.9	58.7	57.3	50.0	42.7	40.6
70°	3569.3	862.4	116.7	86.3	71.0	47.2	46.4	47.9	40.6	34.8	31.9
72.5°	2736.5	394.5	72.6	63.1	48.6	31.9	37.0	37.7	31.2	26.1	23.2
75°	1610.9	169.0	45.7	40.6	24.7	21.0	26.9	27.6	21.0	16.7	14.6
77.5°	548.4	63.9	29.0	24.0	12.3	11.6	17.4	17.4	11.6	6.6	5.1
80°	124.7	24.0	14.6	9.4	5.8	5.1	5.8	5.1	2.9	0.7	0.0
82.5°	35.6	9.4	5.8	3.6	2.2	2.2	0.7	0.0	0.0	0.0	0.0
85°	10.1	4.3	1.4	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	4.3	0.7	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)