

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: P882626

Luminaire Tested: **NAV-SB2C-830-U-T2-HSS**

Issue Date: 10/7/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P882626  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-4)  
Test Lab: INNOVATION CENTER  
Issue Date: 10/7/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NAV-SB2C-830-U-T2-HSS  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(2) 80 CRI, 3000K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

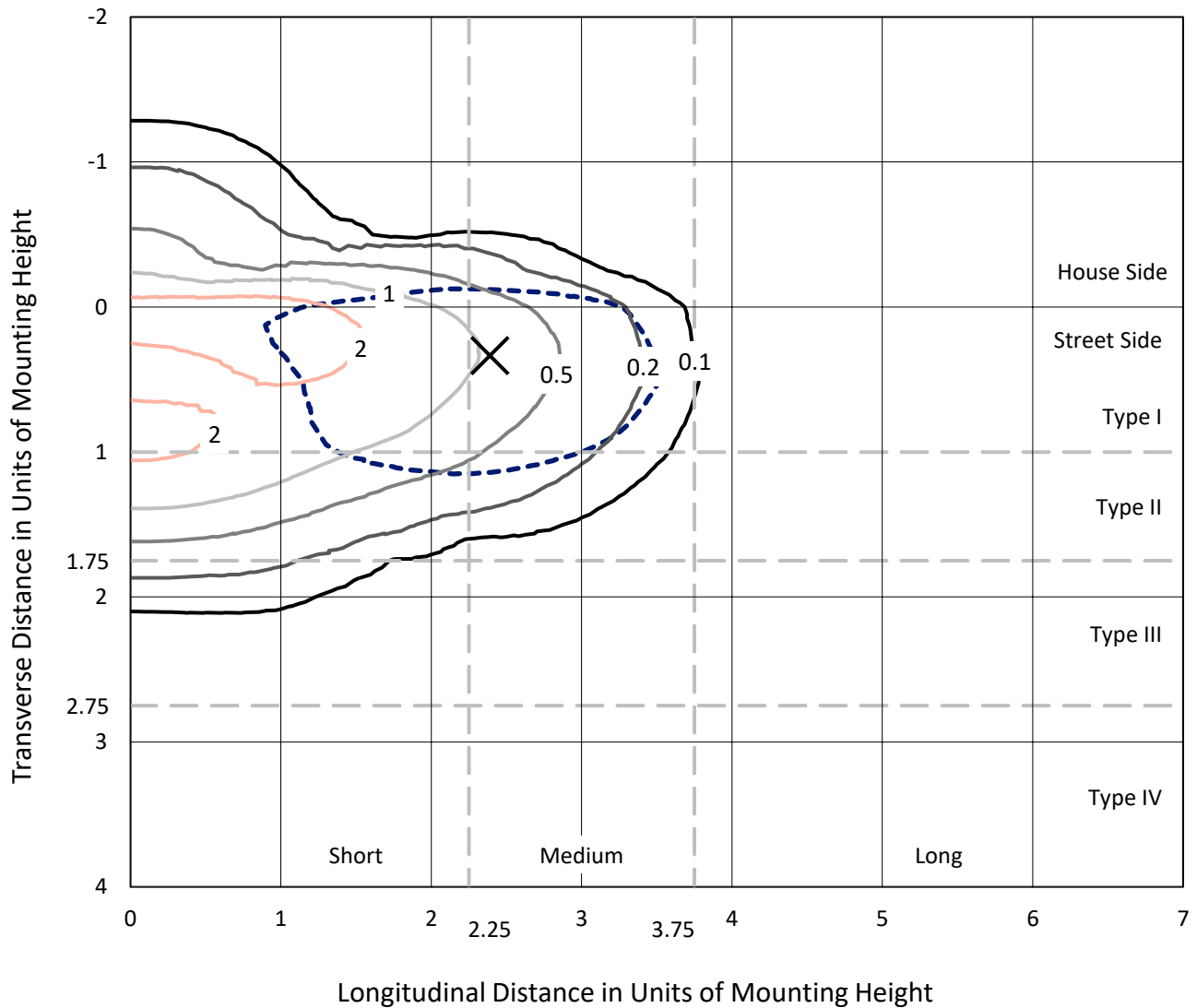
Lumens per Lamp: N/A  
Luminaire Lumens: 9752 lumens  
Efficiency: N/A  
Efficacy: 96.7 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type II - Medium  
BUG Rating: B2 - U0 - G2  
  
Input Watts (W): 100.9  
Input Voltage (V): 120.0  
Input Current (Ain): 0.857  
Voltage Rise (V): NR  
Power Factor: 0.994  
Total Harmonic Distortion (THDi): 9.472  
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

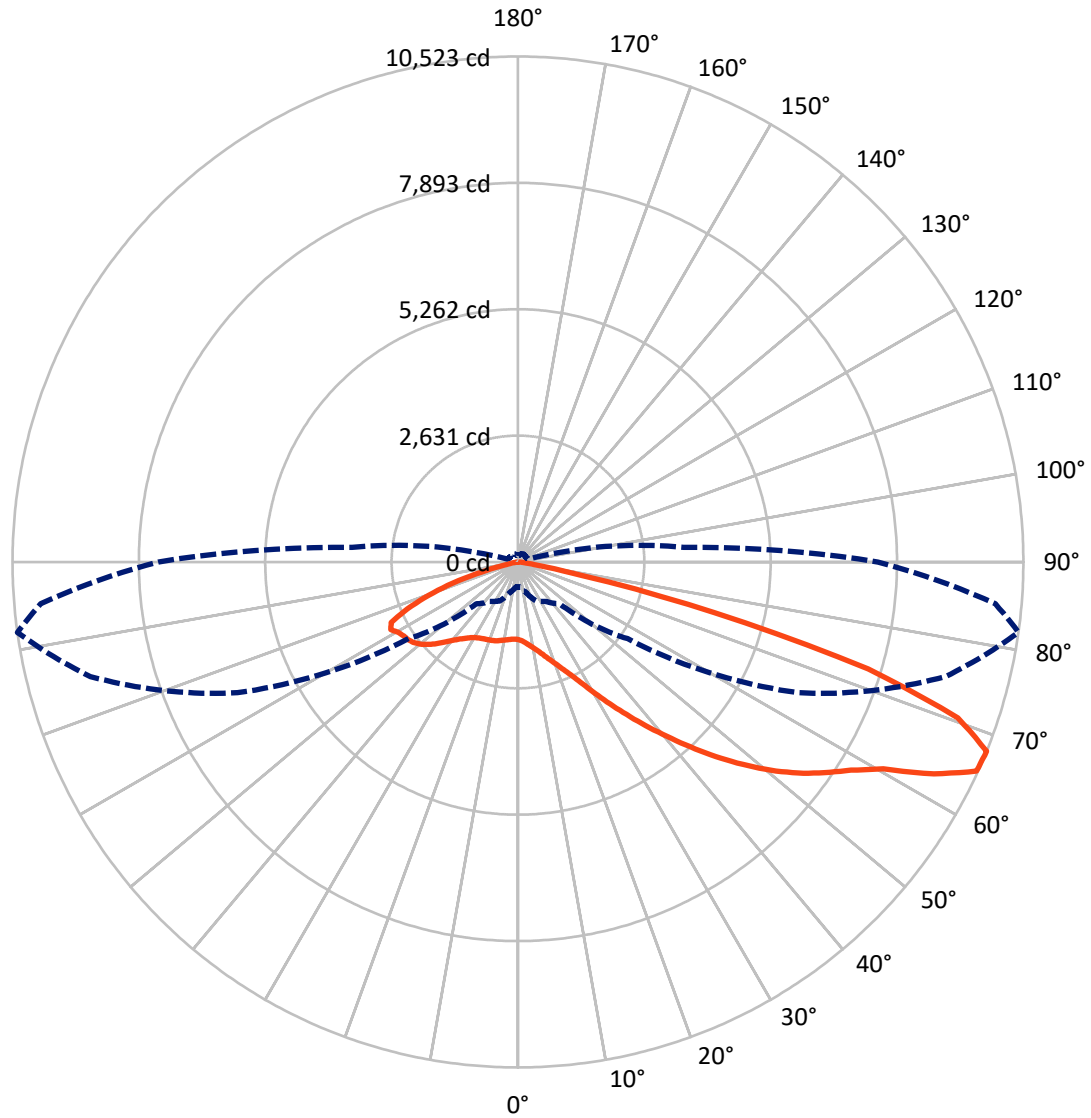
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.4 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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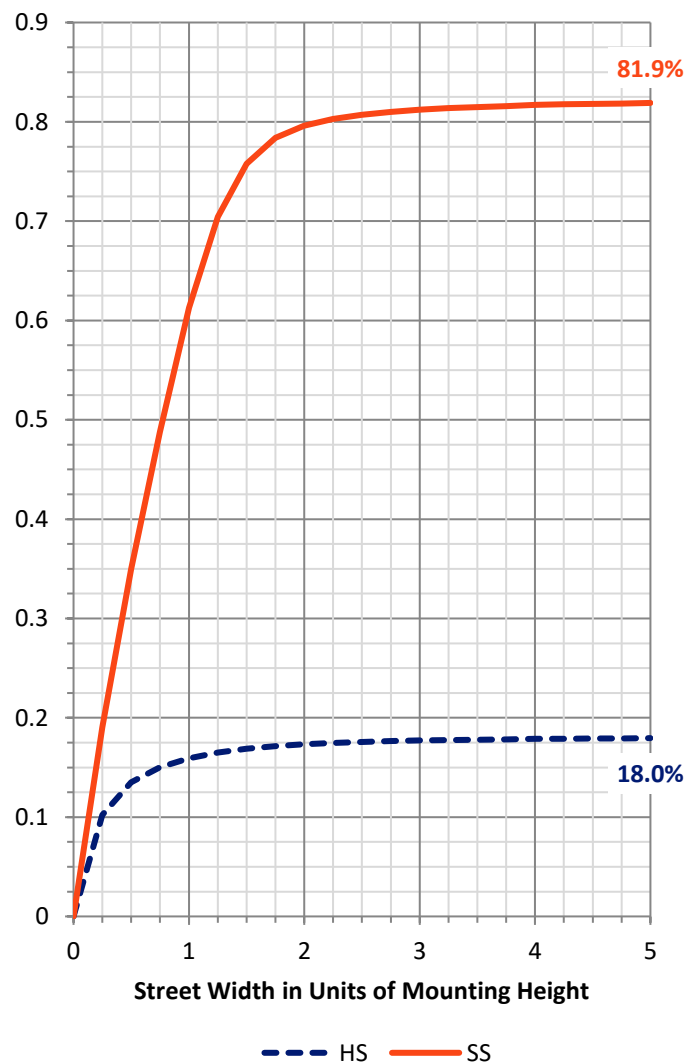
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1766.5	0.0	1766.5
	% Fixture	18.1	0.0	18.1
<b>Street Side</b>	Lumens	7985.5	0.0	7985.5
	% Fixture	81.9	0.0	81.9
<b>Total</b>	Lumens	9752.0	0.0	9752.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	143.9	1.5
10°-20°	374.0	3.8
20°-30°	599.1	6.1
30°-40°	1059.4	10.9
40°-50°	1856.1	19.0
50°-60°	2475.5	25.4
60°-70°	2304.6	23.6
70°-80°	884.5	9.1
80°-90°	54.9	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°	9752.0	100.0
0°-180°	9752.0	100.0

**Coefficient of Utilization**



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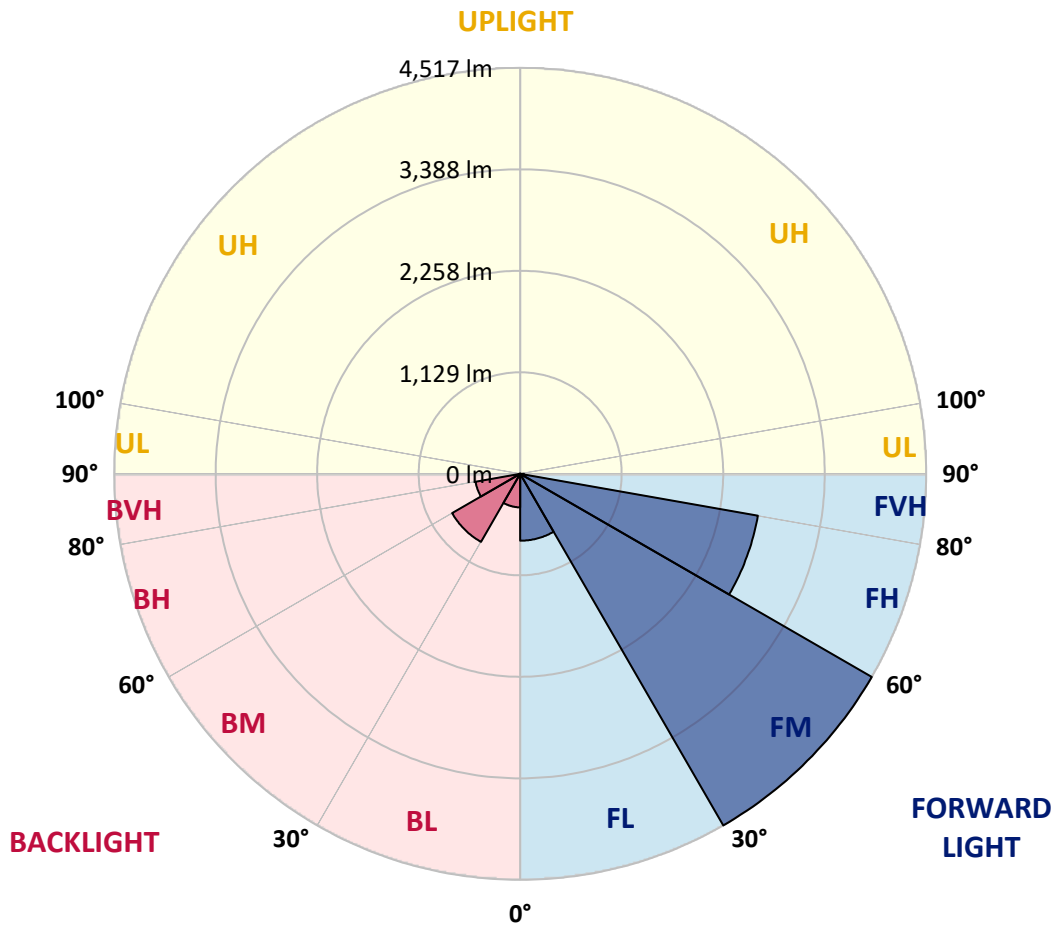
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	744.0	7.6			
FM (30°-60°)	4516.7	46.3			
FH (60°-80°)	2684.9	27.5			G2/5000
FVH (80°-90°)	39.9	0.4			G1/100
BL (0°-30°)	373.1	3.8	B1/500		
BM (30°-60°)	874.2	9.0	B1/1000		
BH (60°-80°)	504.2	5.2	B2/1000		G2/1000
BVH (80°-90°)	15.0	0.2			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G2**

Type II Medium



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	1615.6	1615.6	1615.6	1615.6	1615.6	1615.6	1615.6	1615.6	1615.6	1615.6	1615.6
2.5°	1707.6	1717.4	1711.8	1709.0	1704.0	1697.0	1691.4	1673.9	1655.6	1643.7	1639.4
5°	1742.0	1751.8	1751.1	1753.9	1757.4	1759.5	1758.1	1738.4	1712.5	1692.1	1680.2
7.5°	1712.5	1723.7	1732.8	1746.9	1771.4	1797.4	1810.1	1805.9	1779.2	1751.1	1736.3
10°	1628.9	1640.9	1662.6	1695.6	1747.6	1803.7	1850.8	1872.6	1855.7	1824.8	1804.4
12.5°	1475.9	1487.8	1530.6	1602.2	1689.3	1786.9	1876.8	1935.0	1939.3	1908.4	1884.5
15°	1303.8	1315.8	1361.4	1451.3	1584.0	1740.6	1890.8	2001.0	2038.3	2011.6	1982.8
17.5°	1197.1	1207.6	1242.0	1314.4	1452.7	1647.9	1885.9	2071.3	2156.2	2135.1	2100.7
20°	1164.8	1173.9	1190.1	1240.6	1355.8	1551.7	1853.6	2137.3	2283.3	2271.4	2232.7
22.5°	1199.2	1207.6	1212.6	1235.0	1307.3	1488.5	1812.9	2204.7	2430.7	2432.1	2385.1
25°	1278.6	1287.0	1281.4	1295.4	1327.0	1468.8	1797.4	2284.0	2616.1	2631.5	2578.2
27.5°	1409.2	1409.9	1396.5	1395.8	1400.7	1498.3	1813.6	2369.0	2849.9	2878.7	2812.7
30°	1671.0	1660.5	1609.3	1553.8	1528.5	1586.8	1858.5	2469.4	3125.8	3177.1	3094.2
32.5°	2074.8	2059.3	1965.2	1832.5	1699.1	1729.3	1939.3	2583.8	3426.3	3519.0	3417.9
35°	2512.9	2508.7	2410.4	2213.1	1980.0	1932.2	2070.5	2734.1	3754.2	3901.7	3781.6
37.5°	2920.1	2918.0	2861.8	2629.4	2345.8	2215.2	2281.2	2930.6	4105.3	4318.7	4176.9
40°	3292.2	3298.6	3242.4	3034.6	2748.8	2578.2	2567.7	3173.6	4495.7	4773.0	4604.5
42.5°	3613.8	3620.8	3564.0	3410.2	3146.9	2979.8	2919.4	3471.3	4876.9	5261.0	5061.6
45°	3832.2	3875.7	3867.3	3744.4	3555.5	3382.1	3342.1	3844.8	5311.5	5778.4	5544.6
47.5°	3894.0	3934.0	3997.2	4014.0	3898.9	3728.3	3776.0	4294.9	5751.1	6296.6	6030.5
50°	3741.6	3778.8	3910.1	4084.9	4165.0	4112.3	4198.0	4777.2	6201.1	6813.4	6507.2
52.5°	3441.1	3479.0	3644.7	3921.3	4247.8	4413.5	4621.3	5252.6	6637.1	7302.7	6958.7
55°	3006.5	3046.5	3259.2	3572.4	4089.8	4537.8	4974.5	5727.2	7036.6	7743.0	7365.9
57.5°	2415.3	2444.8	2665.9	3104.1	3692.4	4414.2	5235.0	6245.4	7413.0	8175.5	7769.7
60°	1574.2	1600.1	1857.1	2345.8	3033.9	4001.4	5287.0	6823.2	7912.9	8737.9	8313.8
62.5°	1046.9	1064.4	1216.8	1575.6	2136.5	3208.7	4982.9	7284.5	8645.9	9716.6	9246.9
65°	718.3	735.8	888.2	1138.1	1380.4	2122.5	4108.8	7223.4	9310.1	10493.9	9938.5
67.5°	512.5	527.3	656.5	892.4	999.1	1232.9	2785.3	6442.6	9214.6	10523.4	9975.7
70°	367.2	375.6	482.4	695.1	794.1	740.7	1548.9	4927.5	8068.1	9717.3	9216.0
72.5°	257.0	259.8	334.9	529.4	639.6	540.6	737.2	3285.2	6102.1	7627.1	7144.8
75°	174.1	177.6	225.4	388.3	513.2	412.8	390.4	1761.6	3582.2	4221.8	3784.4
77.5°	106.7	108.1	145.3	265.4	384.1	314.5	251.4	746.4	1386.0	1360.7	1159.9
80°	60.4	60.4	92.7	165.0	261.9	202.9	176.2	317.4	438.8	385.5	339.8
82.5°	33.7	34.4	67.4	102.5	173.4	120.1	96.9	146.7	189.6	167.8	146.0
85°	14.0	15.4	41.4	48.4	82.9	59.7	39.3	61.8	70.2	62.5	45.6
87.5°	1.4	2.1	12.6	9.1	9.8	11.9	5.6	11.9	9.8	9.8	7.0
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°	1615.6	1615.6	1615.6	1615.6	1615.6	1615.6	1615.6	1615.6	1615.6	1615.6	1615.6
2.5°	1626.1	1615.6	1588.9	1558.0	1517.3	1497.6	1470.9	1452.7	1437.2	1438.6	1424.6
5°	1657.7	1631.0	1571.3	1496.9	1404.2	1338.2	1268.0	1219.6	1180.3	1171.8	1152.9
7.5°	1701.2	1659.1	1554.5	1420.4	1263.8	1145.2	1039.1	971.0	922.6	907.1	891.7
10°	1757.4	1696.3	1532.7	1324.2	1098.8	947.9	834.1	780.8	747.8	736.5	728.1
12.5°	1822.7	1739.1	1503.9	1206.9	928.9	783.6	711.2	684.6	674.0	670.5	668.4
15°	1904.8	1792.5	1460.4	1067.9	785.0	683.2	652.3	648.8	650.2	648.8	648.1
17.5°	2002.4	1850.8	1389.5	924.7	688.1	631.9	620.7	623.5	627.0	626.3	624.9
20°	2109.2	1908.4	1298.9	797.6	622.1	595.4	589.1	591.9	594.7	593.3	592.6
22.5°	2230.6	1970.1	1198.5	698.6	577.8	561.7	554.7	555.4	555.4	552.6	551.2
25°	2376.0	2038.3	1093.2	628.4	544.1	531.5	523.1	520.3	516.1	507.6	506.2
27.5°	2549.4	2110.6	992.1	579.2	517.5	505.5	495.7	488.7	478.1	464.1	462.7
30°	2744.6	2198.3	906.4	548.4	496.4	484.5	473.2	462.7	447.2	429.7	428.3
32.5°	2974.2	2292.4	843.9	528.0	477.4	464.8	451.5	438.8	422.0	404.4	405.1
35°	3248.0	2406.2	807.4	514.0	462.7	445.8	431.1	417.1	404.4	389.0	387.6
37.5°	3545.0	2526.9	796.2	506.9	452.9	426.9	410.0	400.2	398.8	389.7	389.0
40°	3870.1	2670.2	804.6	502.7	442.3	408.6	390.4	388.3	391.8	375.6	376.3
42.5°	4214.1	2840.1	818.7	497.8	427.6	390.4	372.8	372.8	370.0	347.5	347.5
45°	4586.2	3036.0	832.7	485.9	410.0	372.1	358.8	353.9	341.9	320.2	319.5
47.5°	4961.2	3235.4	843.2	464.1	389.0	356.7	344.7	333.5	316.0	296.3	295.6
50°	5317.1	3414.4	832.0	431.8	365.1	341.9	329.3	313.8	294.9	281.5	279.4
52.5°	5635.2	3569.6	784.3	393.9	339.8	326.5	315.3	299.1	283.7	269.6	268.2
55°	5911.8	3695.3	700.0	358.1	317.4	313.1	301.9	281.5	260.5	248.6	247.1
57.5°	6177.2	3790.7	594.7	328.6	297.0	298.4	281.5	263.3	243.6	231.0	229.6
60°	6530.4	3918.5	488.0	301.2	275.2	279.4	261.2	247.8	223.3	207.1	205.0
62.5°	7094.9	4117.2	387.6	267.5	250.0	251.4	243.6	227.5	198.0	179.0	177.6
65°	7542.9	4044.2	305.4	231.0	221.2	223.3	223.3	205.7	174.1	152.4	150.3
67.5°	7492.3	3462.9	243.6	195.2	193.8	195.2	200.1	185.4	154.5	136.9	134.1
70°	6901.8	2754.4	195.2	162.2	168.5	165.0	179.0	169.2	139.0	121.5	119.4
72.5°	5631.7	1984.2	148.8	134.1	129.2	134.8	161.5	152.4	115.8	96.2	94.1
75°	3290.8	1058.8	110.9	106.0	93.4	112.3	143.2	129.9	88.5	70.9	68.8
77.5°	1071.4	369.3	81.4	77.9	69.5	90.6	122.2	109.5	72.3	56.2	54.1
80°	287.2	111.6	55.5	51.3	44.9	67.4	96.9	87.1	52.0	36.5	35.8
82.5°	115.1	47.0	32.3	28.8	24.6	46.3	76.5	70.2	38.6	23.2	23.2
85°	37.2	15.4	11.9	9.1	11.2	28.8	45.6	47.7	27.4	11.9	9.1
87.5°	4.9	2.1	2.1	2.8	2.1	4.9	14.0	13.3	7.7	1.4	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)