

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: P882906

Luminaire Tested: **NAV-SB3A-730-U-T2-HSS**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P882906
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-SB3A-730-U-T2-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 70 CRI, 3000K, 350mA 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: 9672 lumens
Efficiency: N/A
Efficacy: 114.2 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1.5' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B2 - U0 - G2

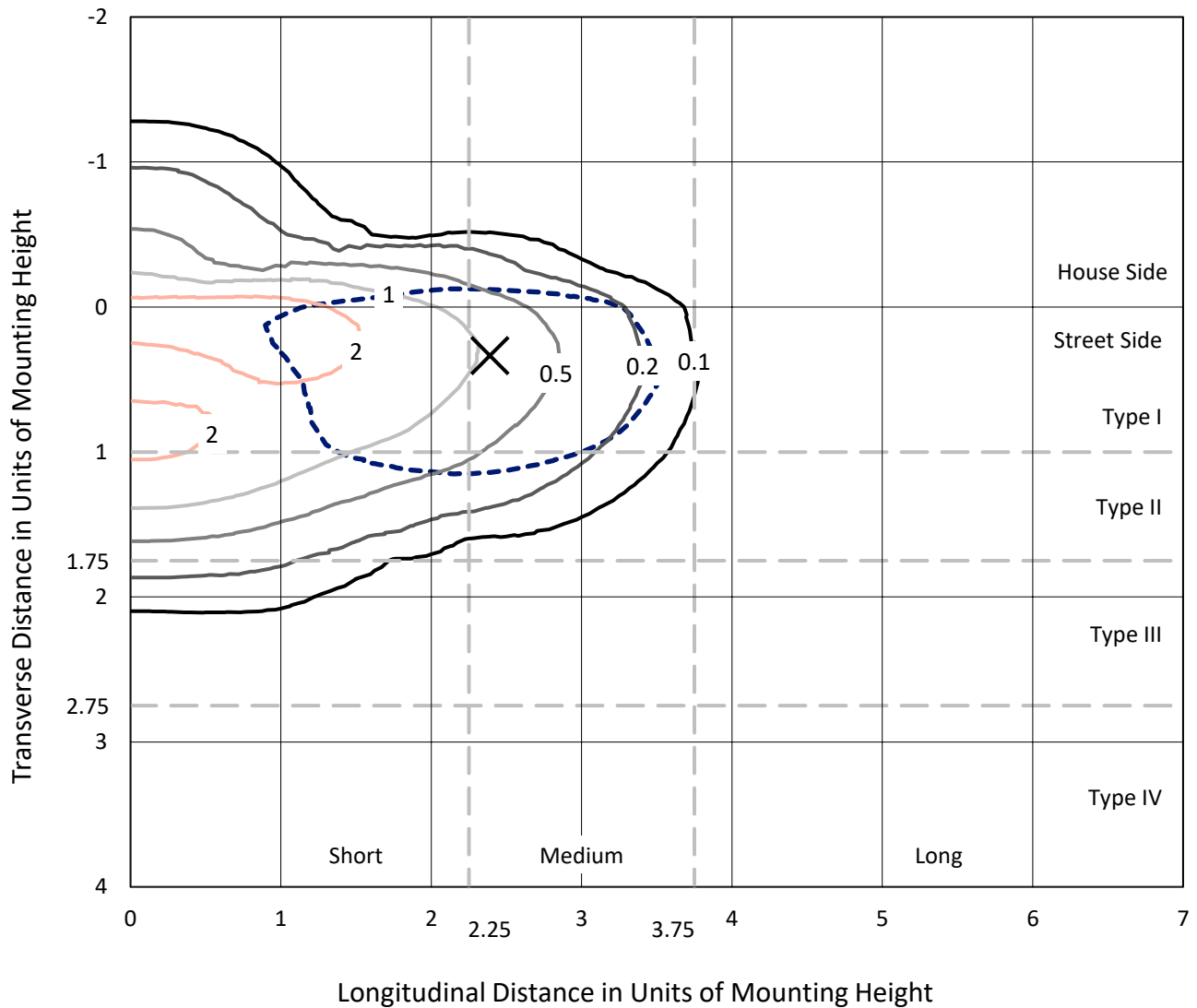
Input Watts (W): 84.7
Input Voltage (V): 120.0
Input Current (Ain): 0.717
Voltage Rise (V): NR
Power Factor: 0.99
Total Harmonic Distortion (THDi): 11.969
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

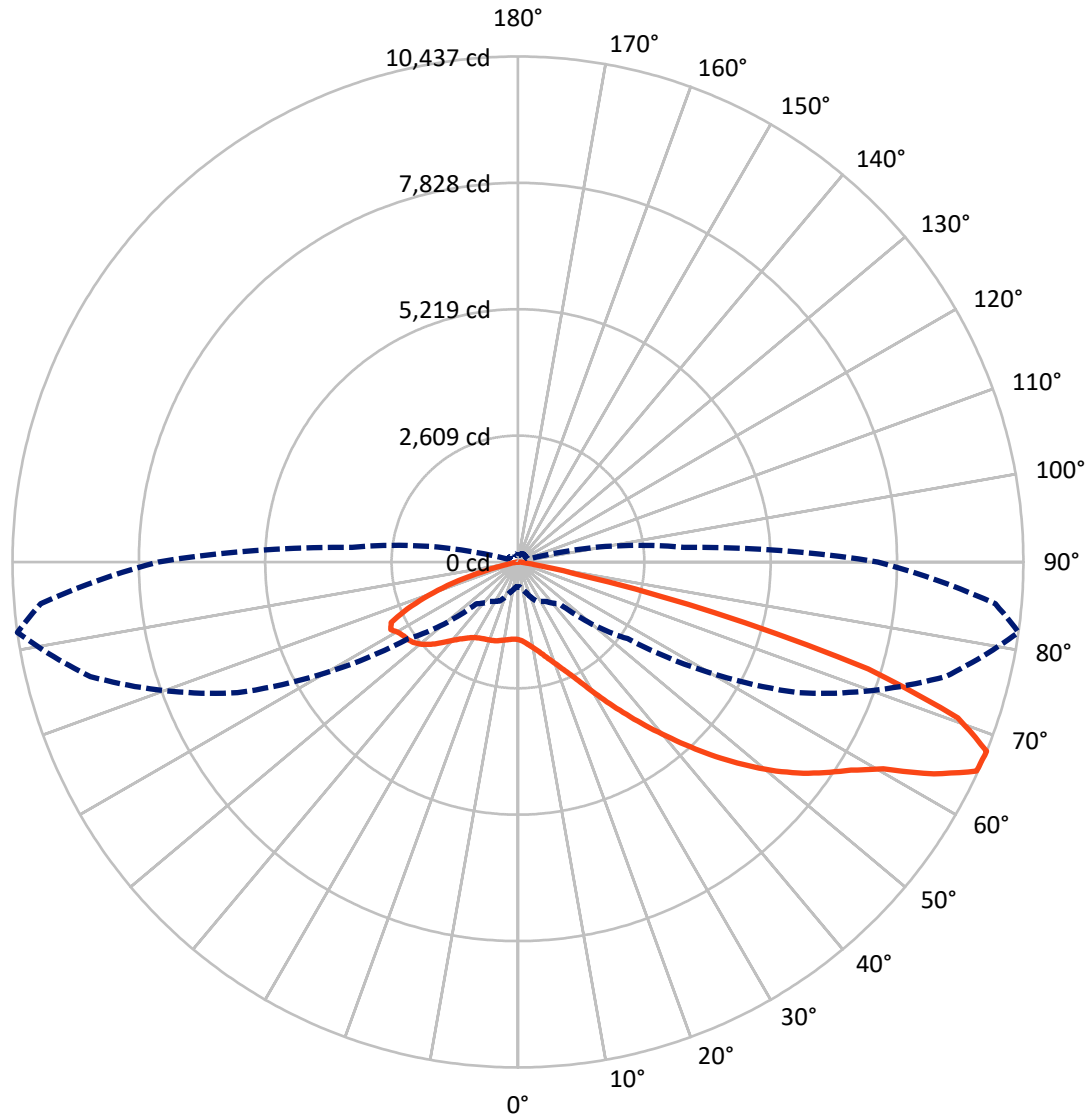
✕ Max cd
 - - - 1/2 Max cd



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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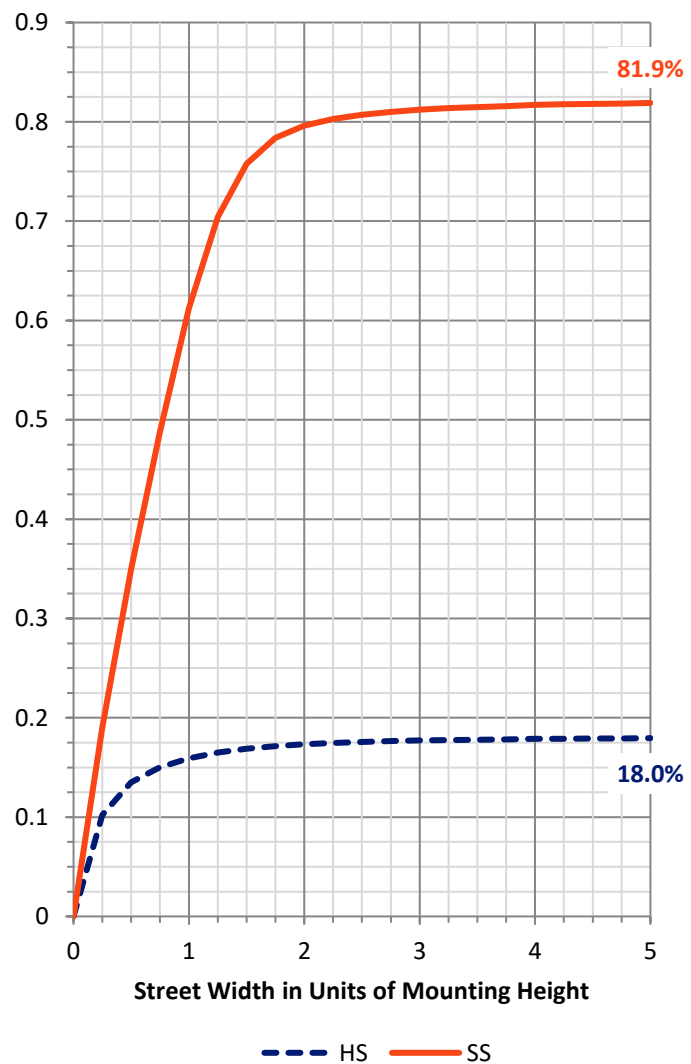
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1752.0	0.0	1752.0
	% Fixture	18.1	0.0	18.1
Street Side	Lumens	7920.0	0.0	7920.0
	% Fixture	81.9	0.0	81.9
Total	Lumens	9672.0	0.0	9672.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	142.8	1.5
10°-20°	371.0	3.8
20°-30°	594.2	6.1
30°-40°	1050.7	10.9
40°-50°	1840.9	19.0
50°-60°	2455.2	25.4
60°-70°	2285.7	23.6
70°-80°	877.2	9.1
80°-90°	54.5	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°	9672.0	100.0
0°-180°	9672.0	100.0

Coefficient of Utilization



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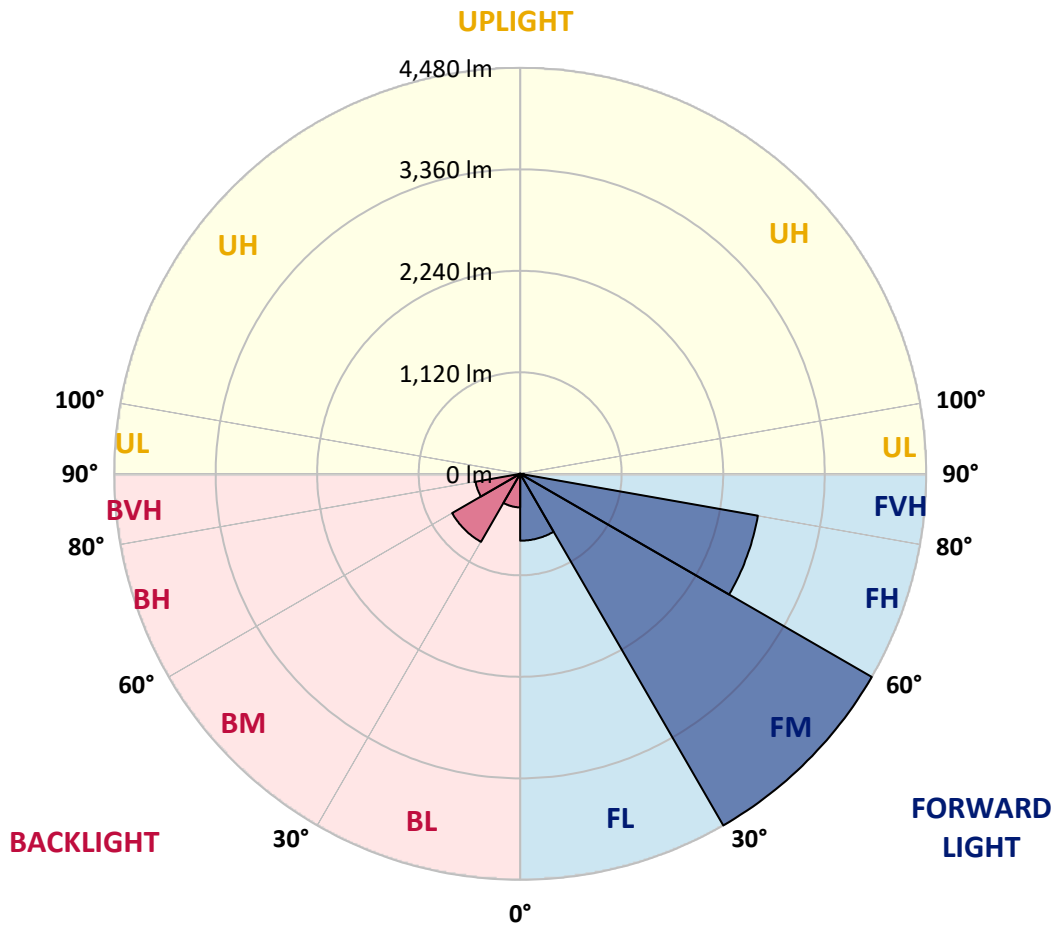
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	737.9	7.6			
FM (30°-60°)	4479.7	46.3			
FH (60°-80°)	2662.9	27.5			G2/5000
FVH (80°-90°)	39.6	0.4			G1/100
BL (0°-30°)	370.0	3.8	B1/500		
BM (30°-60°)	867.1	9.0	B1/1000		
BH (60°-80°)	500.0	5.2	B2/1000		G2/1000
BVH (80°-90°)	14.9	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°	1602.3	1602.3	1602.3	1602.3	1602.3	1602.3	1602.3	1602.3	1602.3	1602.3	1602.3
2.5°	1693.5	1703.3	1697.7	1694.9	1690.1	1683.1	1677.5	1660.1	1642.0	1630.2	1626.0
5°	1727.7	1737.4	1736.7	1739.5	1743.0	1745.1	1743.7	1724.2	1698.4	1678.2	1666.4
7.5°	1698.4	1709.6	1718.6	1732.5	1756.9	1782.7	1795.2	1791.0	1764.6	1736.7	1722.1
10°	1615.6	1627.4	1649.0	1681.7	1733.2	1788.9	1835.6	1857.2	1840.5	1809.8	1789.6
12.5°	1463.7	1475.6	1518.1	1589.1	1675.4	1772.2	1861.4	1919.2	1923.3	1892.7	1869.0
15°	1293.1	1305.0	1350.2	1439.4	1571.0	1726.3	1875.3	1984.6	2021.5	1995.1	1966.5
17.5°	1187.3	1197.7	1231.9	1303.6	1440.8	1634.4	1870.4	2054.3	2138.5	2117.6	2083.5
20°	1155.3	1164.3	1180.3	1230.5	1344.7	1539.0	1838.4	2119.7	2264.6	2252.7	2214.4
22.5°	1189.4	1197.7	1202.6	1224.9	1296.6	1476.3	1798.0	2186.6	2410.8	2412.2	2365.5
25°	1268.1	1276.4	1270.9	1284.8	1316.1	1456.8	1782.7	2265.3	2594.6	2610.0	2557.0
27.5°	1397.6	1398.3	1385.1	1384.4	1389.2	1486.0	1798.7	2349.5	2826.5	2855.1	2789.6
30°	1657.3	1646.9	1596.1	1541.0	1516.0	1573.8	1843.3	2449.1	3100.2	3151.0	3068.9
32.5°	2057.7	2042.4	1949.1	1817.5	1685.2	1715.1	1923.3	2562.6	3398.2	3490.2	3389.9
35°	2492.3	2488.1	2390.6	2194.9	1963.7	1916.4	2053.6	2711.6	3723.4	3869.7	3750.6
37.5°	2896.2	2894.1	2838.4	2607.9	2326.5	2197.0	2262.5	2906.6	4071.6	4283.3	4142.6
40°	3265.2	3271.5	3215.8	3009.7	2726.2	2557.0	2546.6	3147.5	4458.8	4733.9	4566.7
42.5°	3584.2	3591.1	3534.7	3382.2	3121.1	2955.3	2895.5	3442.8	4836.9	5217.8	5020.1
45°	3800.7	3843.9	3835.5	3713.7	3526.4	3354.4	3314.7	3813.3	5268.0	5731.0	5499.2
47.5°	3862.0	3901.7	3964.4	3981.1	3866.9	3697.7	3745.0	4259.6	5703.9	6245.0	5981.0
50°	3710.9	3747.8	3878.0	4051.4	4130.8	4078.6	4163.5	4738.0	6150.2	6757.5	6453.9
52.5°	3412.9	3450.5	3614.8	3889.2	4213.0	4377.3	4583.4	5209.5	6582.7	7242.8	6901.6
55°	2981.8	3021.5	3232.5	3543.1	4056.3	4500.6	4933.7	5680.2	6978.9	7679.5	7305.5
57.5°	2395.5	2424.7	2644.1	3078.6	3662.2	4378.0	5192.1	6194.1	7352.2	8108.4	7705.9
60°	1561.2	1587.0	1841.9	2326.5	3009.0	3968.6	5243.6	6767.2	7848.0	8666.2	8245.6
62.5°	1038.3	1055.7	1206.8	1562.6	2119.0	3182.4	4942.1	7224.7	8575.0	9636.9	9171.1
65°	712.4	729.8	880.9	1128.8	1369.0	2105.1	4075.1	7164.1	9233.7	10407.8	9857.0
67.5°	508.3	523.0	651.1	885.1	990.9	1222.8	2762.5	6389.8	9139.0	10437.0	9893.9
70°	364.2	372.6	478.4	689.4	787.6	734.7	1536.2	4887.1	8001.9	9637.6	9140.4
72.5°	254.9	257.7	332.2	525.1	634.4	536.2	731.2	3258.3	6052.1	7564.6	7086.2
75°	172.7	176.2	223.5	385.1	509.0	409.5	387.2	1747.2	3552.8	4187.2	3753.4
77.5°	105.8	107.2	144.1	263.2	380.9	312.0	249.3	740.2	1374.6	1349.5	1150.4
80°	59.9	59.9	91.9	163.6	259.7	201.2	174.8	314.8	435.2	382.3	337.0
82.5°	33.4	34.1	66.9	101.7	172.0	119.1	96.1	145.5	188.0	166.4	144.8
85°	13.9	15.3	41.1	48.0	82.2	59.2	39.0	61.3	69.6	62.0	45.3
87.5°	1.4	2.1	12.5	9.1	9.7	11.8	5.6	11.8	9.7	9.7	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°	1602.3	1602.3	1602.3	1602.3	1602.3	1602.3	1602.3	1602.3	1602.3	1602.3	1602.3
2.5°	1612.8	1602.3	1575.9	1545.2	1504.8	1485.3	1458.9	1440.8	1425.4	1426.8	1412.9
5°	1644.1	1617.6	1558.5	1484.6	1392.7	1327.3	1257.6	1209.6	1170.6	1162.2	1143.4
7.5°	1687.3	1645.5	1541.7	1408.7	1253.4	1135.8	1030.6	963.1	915.0	899.7	884.4
10°	1743.0	1682.4	1520.2	1313.3	1089.8	940.1	827.3	774.4	741.6	730.5	722.1
12.5°	1807.7	1724.9	1491.6	1197.0	921.3	777.1	705.4	679.0	668.5	665.0	662.9
15°	1889.2	1777.8	1448.4	1059.2	778.5	677.6	646.9	643.4	644.8	643.4	642.7
17.5°	1986.0	1835.6	1378.1	917.1	682.4	626.7	615.6	618.4	621.8	621.2	619.8
20°	2091.9	1892.7	1288.3	791.1	617.0	590.5	584.2	587.0	589.8	588.4	587.7
22.5°	2212.3	1954.0	1188.7	692.9	573.1	557.1	550.1	550.8	550.8	548.0	546.6
25°	2356.5	2021.5	1084.2	623.2	539.7	527.1	518.8	516.0	511.8	503.5	502.1
27.5°	2528.5	2093.3	984.0	574.5	513.2	501.4	491.6	484.7	474.2	460.3	458.9
30°	2722.1	2180.3	899.0	543.9	492.3	480.5	469.3	458.9	443.6	426.2	424.8
32.5°	2949.8	2273.6	837.0	523.7	473.5	461.0	447.8	435.2	418.5	401.1	401.8
35°	3221.4	2386.4	800.8	509.7	458.9	442.2	427.6	413.6	401.1	385.8	384.4
37.5°	3515.9	2506.2	789.7	502.8	449.2	423.4	406.7	396.9	395.5	386.5	385.8
40°	3838.3	2648.3	798.0	498.6	438.7	405.3	387.2	385.1	388.6	372.6	373.2
42.5°	4179.5	2816.8	812.0	493.7	424.1	387.2	369.8	369.8	367.0	344.7	344.7
45°	4548.6	3011.1	825.9	481.9	406.7	369.1	355.8	351.0	339.1	317.5	316.8
47.5°	4920.5	3208.8	836.3	460.3	385.8	353.8	341.9	330.8	313.4	293.9	293.2
50°	5273.5	3386.4	825.2	428.3	362.1	339.1	326.6	311.3	292.5	279.2	277.2
52.5°	5589.0	3540.3	777.8	390.7	337.0	323.8	312.7	296.6	281.3	267.4	266.0
55°	5863.3	3664.9	694.3	355.1	314.8	310.6	299.4	279.2	258.3	246.5	245.1
57.5°	6126.6	3759.6	589.8	325.9	294.6	296.0	279.2	261.1	241.6	229.1	227.7
60°	6476.8	3886.4	484.0	298.7	273.0	277.2	259.0	245.8	221.4	205.4	203.3
62.5°	7036.7	4083.5	384.4	265.3	247.9	249.3	241.6	225.6	196.4	177.6	176.2
65°	7481.0	4011.0	302.9	229.1	219.4	221.4	221.4	204.0	172.7	151.1	149.0
67.5°	7430.9	3434.4	241.6	193.6	192.2	193.6	198.5	183.8	153.2	135.8	133.0
70°	6845.2	2731.8	193.6	160.9	167.1	163.6	177.6	167.8	137.9	120.5	118.4
72.5°	5585.5	1967.9	147.6	133.0	128.1	133.7	160.2	151.1	114.9	95.4	93.3
75°	3263.8	1050.1	110.0	105.2	92.6	111.4	142.1	128.8	87.7	70.3	68.2
77.5°	1062.6	366.3	80.8	77.3	68.9	89.8	121.2	108.6	71.7	55.7	53.6
80°	284.8	110.7	55.0	50.8	44.6	66.9	96.1	86.3	51.5	36.2	35.5
82.5°	114.2	46.7	32.0	28.6	24.4	46.0	75.9	69.6	38.3	23.0	23.0
85°	36.9	15.3	11.8	9.1	11.1	28.6	45.3	47.4	27.2	11.8	9.1
87.5°	4.9	2.1	2.1	2.8	2.1	4.9	13.9	13.2	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)