

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: P966662

Luminaire Tested: **NAV-SB4C-735-U-AFL**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P966662
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-14)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB4C-735-U-AFL
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(4) 70 CRI, 3500K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND AUTOMOTIVE
FRONTLINE OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 31289.1 lumens
Efficiency: N/A
Efficacy: 155.9 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B3 - U0 - G3

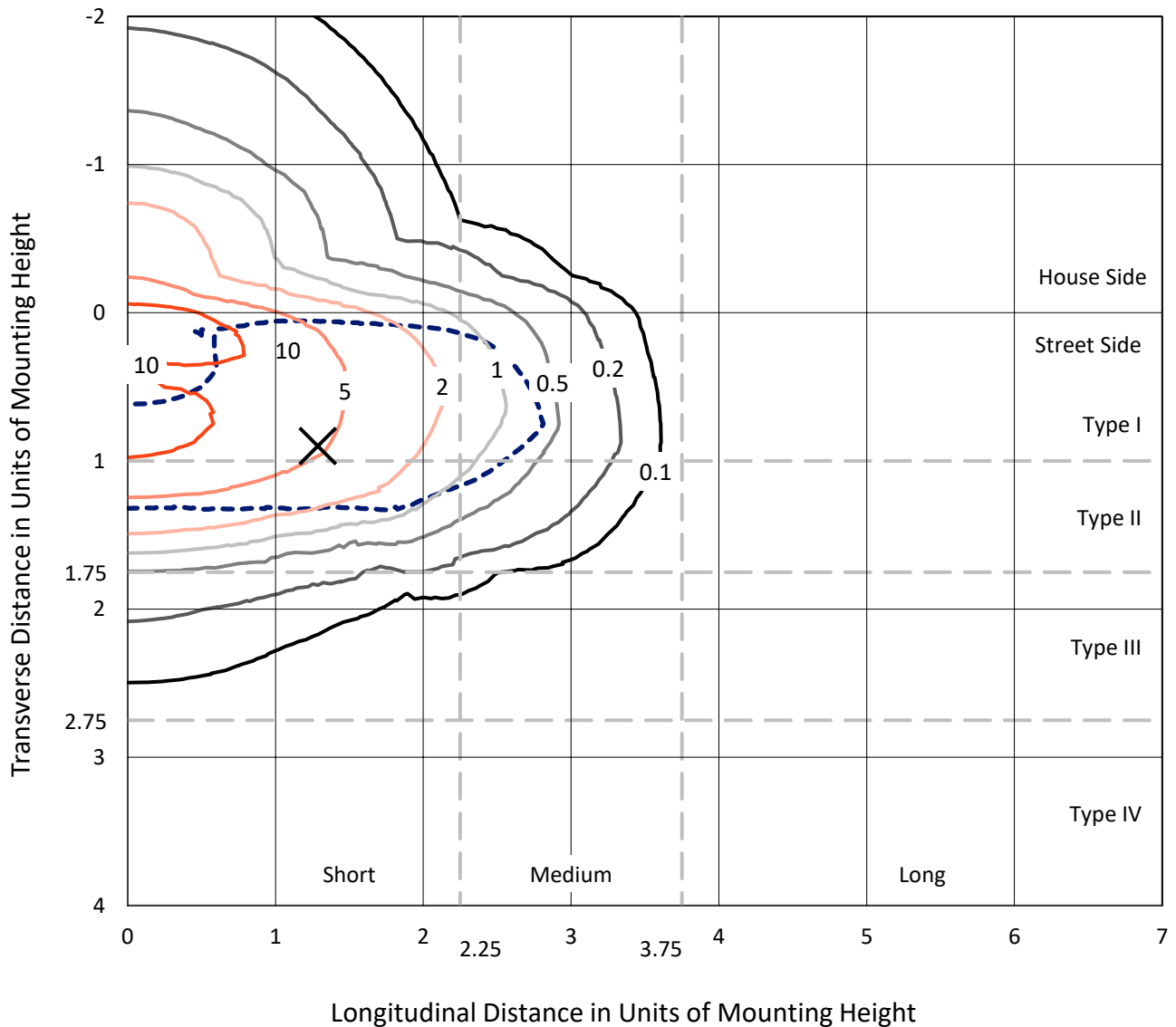
Input Watts (W): 200.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

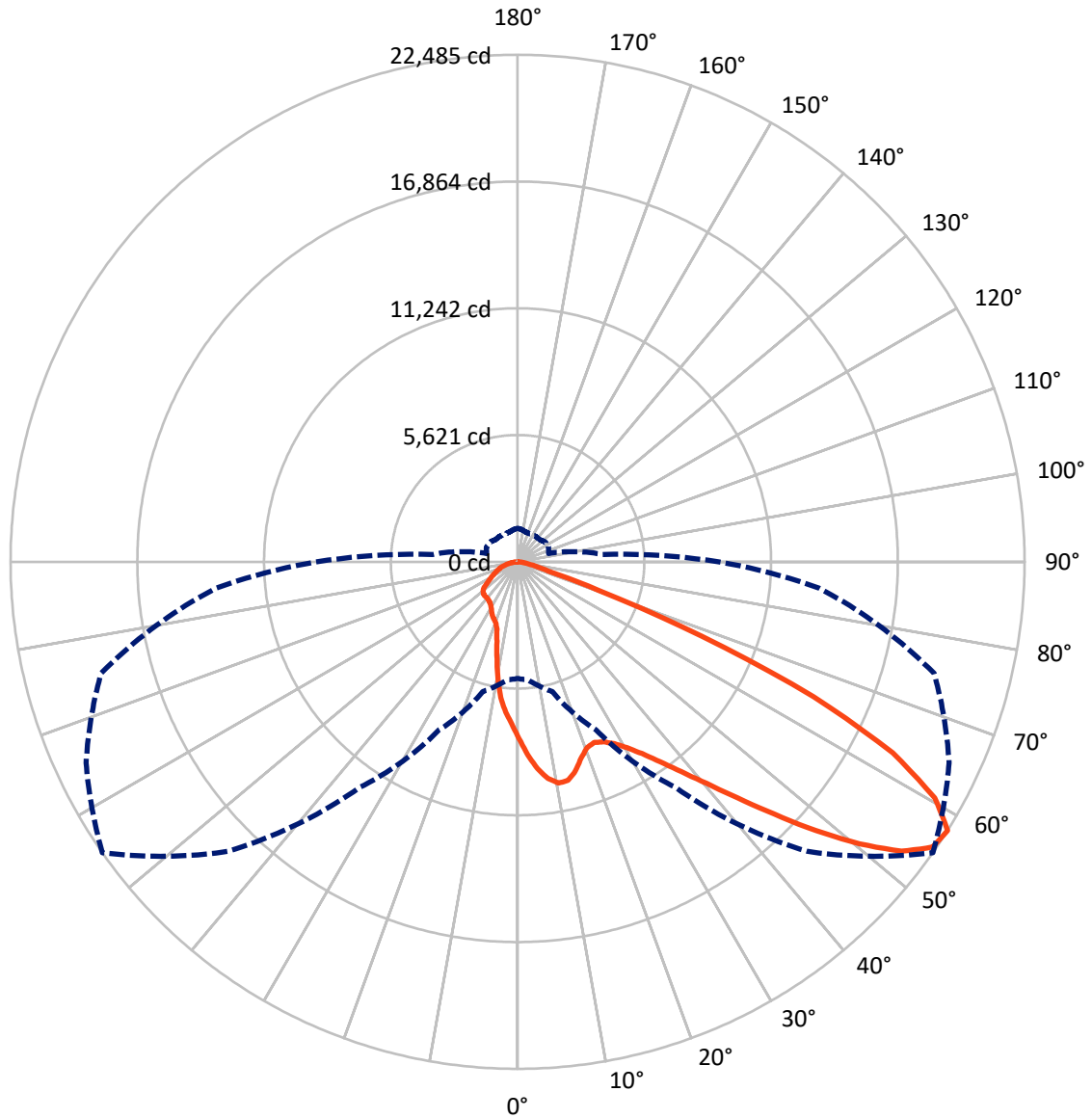
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 15.2 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 55-Deg Lateral - - - Horizontal Cone Through 57.5-Deg Vertical

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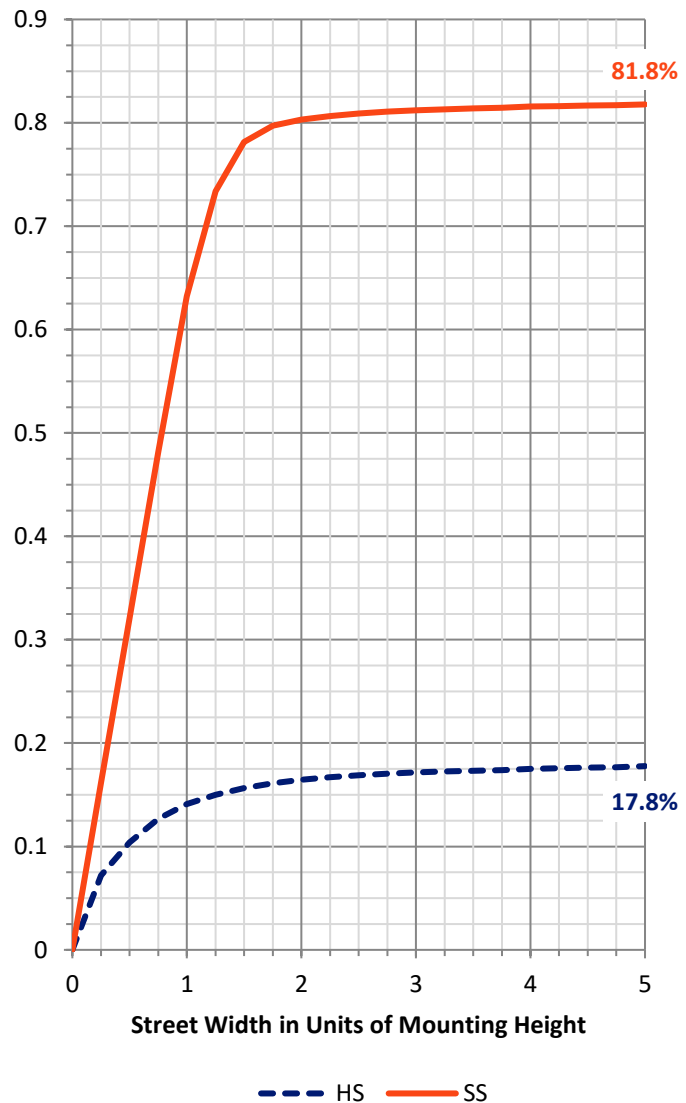
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5661.6	0.0	5661.6
	% Fixture	18.1	0.0	18.1
Street Side	Lumens	25627.5	0.0	25627.5
	% Fixture	81.9	0.0	81.9
Total	Lumens	31289.1	0.0	31289.1
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	727.5	2.3
10°-20°	1836.3	5.9
20°-30°	2930.2	9.4
30°-40°	4639.2	14.8
40°-50°	7100.7	22.7
50°-60°	7605.5	24.3
60°-70°	4784.7	15.3
70°-80°	1414.9	4.5
80°-90°	250.2	0.8
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°	31289.1	100.0
0°-180°	31289.1	100.0

Coefficient of Utilization



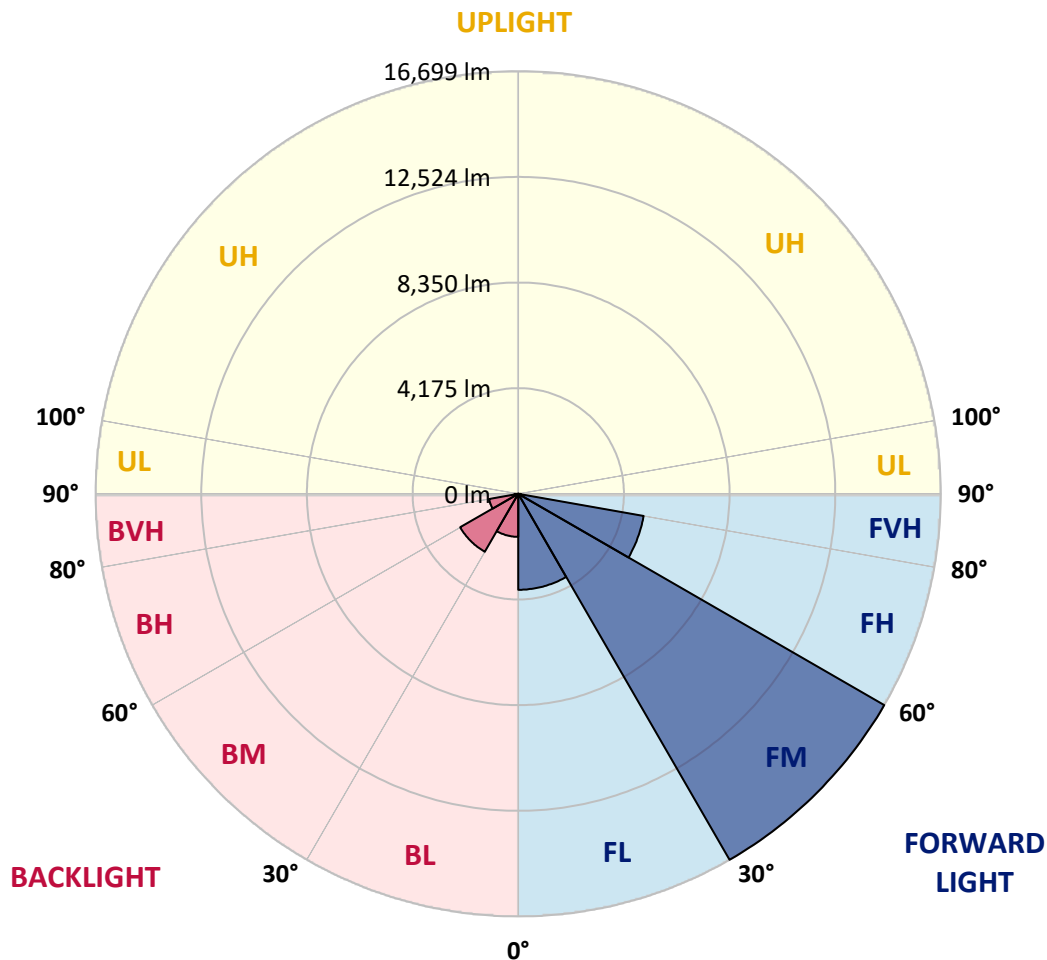
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	3792.2	12.1			
FM (30°-60°)	16699.2	53.4			
FH (60°-80°)	5030.3	16.1			G3/7500
FVH (80°-90°)	105.7	0.3			G2/225
BL (0°-30°)	1701.7	5.4	B3/2500		
BM (30°-60°)	2646.2	8.5	B3/5000		
BH (60°-80°)	1169.3	3.7	B3/2500		G3/2500
BVH (80°-90°)	144.5	0.5			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3

Type II Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	7840.0	7840.0	7840.0	7840.0	7840.0	7840.0	7840.0	7840.0	7840.0	7840.0	7840.0
2.5°	8995.0	8988.4	9024.1	8902.7	8820.2	8708.6	8561.4	8373.8	8171.6	7958.1	7866.0
5°	9805.4	9748.7	9785.9	9695.4	9604.8	9436.6	9218.1	8912.5	8538.8	8113.4	7887.0
7.5°	9677.5	9638.7	9734.1	9815.0	9882.9	9861.9	9701.8	9381.5	8899.5	8281.6	7953.3
10°	8647.2	8603.5	8737.7	9017.5	9428.5	9785.9	9980.0	9781.1	9268.3	8466.0	8018.0
12.5°	7738.1	7717.1	7806.1	8032.5	8488.6	9174.5	9944.4	10130.4	9651.6	8684.4	8105.3
15°	7350.0	7324.0	7380.7	7495.5	7786.6	8425.6	9621.0	10369.8	10028.5	8936.7	8244.4
17.5°	7264.2	7235.1	7259.4	7319.2	7506.8	7993.7	9132.4	10487.9	10421.6	9218.1	8360.9
20°	7422.7	7398.4	7401.7	7398.4	7529.4	7916.1	8792.8	10442.6	10764.4	9476.9	8474.1
22.5°	7806.1	7765.6	7767.2	7681.6	7752.7	8051.9	8703.8	10321.3	11070.2	9703.4	8559.9
25°	8430.4	8357.6	8372.2	8153.9	8134.4	8356.0	8842.9	10227.4	11374.3	9884.6	8576.0
27.5°	9284.4	9201.9	9158.3	8833.1	8678.0	8787.9	9126.0	10259.8	11662.2	10041.5	8535.6
30°	10352.0	10251.7	10162.8	9701.8	9420.4	9379.9	9565.9	10473.3	12001.9	10206.4	8466.0
32.5°	11660.6	11544.2	11382.4	10771.0	10374.6	10162.8	10135.3	10853.4	12399.8	10416.8	8430.4
35°	13218.3	13066.2	12836.5	12045.6	11544.2	11110.6	10885.8	11401.8	12944.9	10733.8	8470.9
37.5°	14822.8	14651.4	14441.1	13499.7	12883.4	12244.5	11801.3	12145.8	13671.1	11164.0	8577.6
40°	16302.8	16110.3	15914.7	15076.7	14415.2	13645.3	12922.3	13087.2	14559.2	11678.3	8758.8
42.5°	17176.2	17034.0	16959.5	16506.6	15995.5	15214.3	14316.6	14203.3	15557.1	12270.4	8965.8
45°	17137.5	17079.3	17308.9	17496.5	17375.2	16941.7	15950.2	15437.4	16558.4	12783.2	9156.7
47.5°	16222.0	16260.8	16773.5	17828.1	18292.4	18518.8	17810.3	16649.0	17428.6	13166.5	9242.4
50°	13731.0	13763.4	14950.5	17224.8	18528.5	19804.7	19655.9	17831.4	18103.1	13401.1	9223.1
52.5°	11759.2	11780.3	12289.7	15435.9	17748.9	20451.7	21318.7	18945.8	18596.5	13465.7	9114.6
55°	8857.4	8930.2	9501.2	12110.3	15720.5	19939.0	22331.3	20094.3	18908.6	13472.2	9001.4
57.5°	5174.4	5253.6	5958.8	8220.2	12218.6	18151.6	22484.9	21113.3	19120.6	13420.4	8933.5
60°	2534.6	2568.5	2875.9	4320.4	7534.4	14707.9	21249.2	21606.6	19238.6	13393.0	8930.2
62.5°	1708.1	1703.2	1716.2	2131.9	3712.1	9449.5	18674.1	20742.9	19175.5	13287.8	8897.9
65°	1468.7	1450.9	1402.4	1496.2	1923.2	4322.0	14428.1	18164.5	18695.1	13024.2	8676.3
67.5°	1269.8	1271.3	1272.9	1243.8	1373.3	1994.3	8817.0	14308.5	16970.8	11775.4	7822.3
70°	1051.3	1065.9	1072.4	1072.4	1119.3	1308.5	3763.9	9806.9	13386.5	9232.7	6300.2
72.5°	957.6	926.8	930.1	913.9	913.9	996.4	1515.6	5559.4	8433.7	5193.8	3844.8
75°	781.3	800.6	803.9	792.5	755.4	760.2	899.3	2332.5	3608.6	2154.5	1900.6
77.5°	674.4	674.4	681.0	672.9	643.8	569.4	600.1	904.2	1227.6	883.1	949.5
80°	541.8	540.3	567.7	583.9	538.6	420.6	383.3	499.8	545.1	388.2	493.3
82.5°	263.6	279.8	389.8	444.8	409.2	304.1	234.5	310.6	291.1	171.5	221.6
85°	153.6	145.5	174.7	247.4	234.5	168.2	113.3	161.7	152.0	87.3	89.0
87.5°	48.5	45.3	35.6	84.2	68.0	46.9	30.7	46.9	42.0	19.4	19.4
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):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	7840.0	7840.0	7840.0	7840.0	7840.0	7840.0	7840.0	7840.0	7840.0	7840.0
2.5°	7751.0	7560.2	7371.0	7197.9	7092.8	7024.8	6956.9	6880.8	6851.7	6808.0
5°	7673.5	7304.7	6976.3	6693.2	6436.1	6233.8	6030.1	5865.0	5790.6	5840.9
7.5°	7628.2	7094.3	6588.1	6068.9	5569.0	5169.6	4821.8	4577.5	4467.6	4495.0
10°	7587.7	6856.6	6085.0	5265.0	4546.8	4051.8	3696.0	3510.0	3440.4	3455.0
12.5°	7550.6	6589.7	5478.5	4399.6	3636.2	3309.4	3207.5	3209.2	3222.1	3231.8
15°	7544.0	6267.9	4800.8	3642.6	3144.4	3123.4	3233.4	3303.0	3340.2	3351.4
17.5°	7534.4	5882.9	4110.0	3126.7	3024.8	3167.0	3268.9	3314.2	3343.3	3345.0
20°	7495.5	5394.4	3472.8	2880.8	2998.8	3121.7	3184.9	3220.4	3244.7	3252.8
22.5°	7375.8	4850.9	2976.2	2770.8	2895.3	2994.0	3068.4	3108.8	3123.4	3133.1
25°	7160.6	4242.7	2633.3	2665.6	2751.4	2875.9	2935.8	2943.9	2939.0	2953.5
27.5°	6879.3	3590.9	2419.8	2523.3	2633.3	2740.0	2772.4	2767.5	2757.9	2774.1
30°	6539.6	3005.3	2283.9	2363.1	2513.6	2610.7	2639.8	2628.4	2609.0	2626.9
32.5°	6180.4	2526.5	2172.3	2251.6	2414.9	2510.3	2539.4	2528.2	2513.6	2528.2
35°	5845.7	2191.8	2068.8	2177.2	2337.3	2431.1	2468.3	2469.9	2469.9	2487.7
37.5°	5538.4	1996.0	1983.1	2130.3	2283.9	2368.1	2421.4	2424.6	2355.0	2360.0
40°	5253.6	1913.5	1944.2	2099.5	2232.1	2313.0	2316.3	2135.1	2007.4	2004.1
42.5°	5020.8	1897.4	1955.6	2096.3	2194.9	2198.2	1970.2	1829.4	1793.9	1795.4
45°	4802.3	1892.5	1981.4	2096.3	2140.0	1898.9	1745.3	1708.1	1711.3	1724.3
47.5°	4558.2	1873.1	1986.2	2067.2	1981.4	1688.7	1643.4	1627.2	1620.7	1624.0
50°	4291.3	1803.5	1924.8	2008.9	1709.7	1598.1	1541.5	1536.7	1544.7	1549.6
52.5°	4009.8	1690.3	1819.7	1903.8	1585.2	1518.8	1455.7	1467.1	1502.6	1514.0
55°	3825.4	1557.7	1680.6	1693.5	1497.8	1444.4	1391.0	1417.0	1483.3	1504.3
57.5°	3776.9	1417.0	1522.0	1507.5	1386.2	1379.8	1347.4	1370.0	1454.2	1484.9
60°	3762.4	1290.8	1366.8	1355.5	1277.9	1308.5	1300.5	1311.8	1340.9	1350.6
62.5°	3649.1	1190.4	1227.6	1211.6	1180.8	1234.2	1253.6	1229.3	1251.9	1263.3
65°	3361.2	1109.6	1091.8	1080.5	1093.5	1142.0	1180.8	1132.2	1153.3	1185.6
67.5°	2885.6	999.6	951.1	964.0	1004.5	1030.3	1080.5	1025.5	1043.2	1098.3
70°	2334.0	860.5	816.8	854.0	892.9	946.3	954.4	917.2	959.2	1020.7
72.5°	1651.5	719.8	689.1	765.1	778.0	847.6	829.7	812.0	870.2	891.2
75°	1145.2	580.7	562.9	621.2	668.0	727.9	714.9	735.9	858.8	868.6
77.5°	724.7	451.3	439.9	477.1	541.8	608.1	629.2	868.6	1467.1	1525.3
80°	420.6	336.4	323.5	352.6	409.2	470.7	606.6	1065.9	967.3	955.9
82.5°	234.5	231.3	215.1	223.2	273.4	339.7	857.3	750.5	609.8	629.2
85°	110.0	135.9	116.4	111.6	153.6	397.9	572.6	428.7	284.6	278.2
87.5°	29.1	25.8	25.8	29.1	64.7	342.9	228.1	182.8	108.3	105.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)