

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: P962404

Luminaire Tested: **NAV-SB2C-727-U-T3R-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P962404
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-SB2C-727-U-T3R-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 70 CRI, 2700K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III
ROADWAY OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 11854.1 lumens
Efficiency: N/A
Efficacy: 117.5 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B1 - U0 - G2

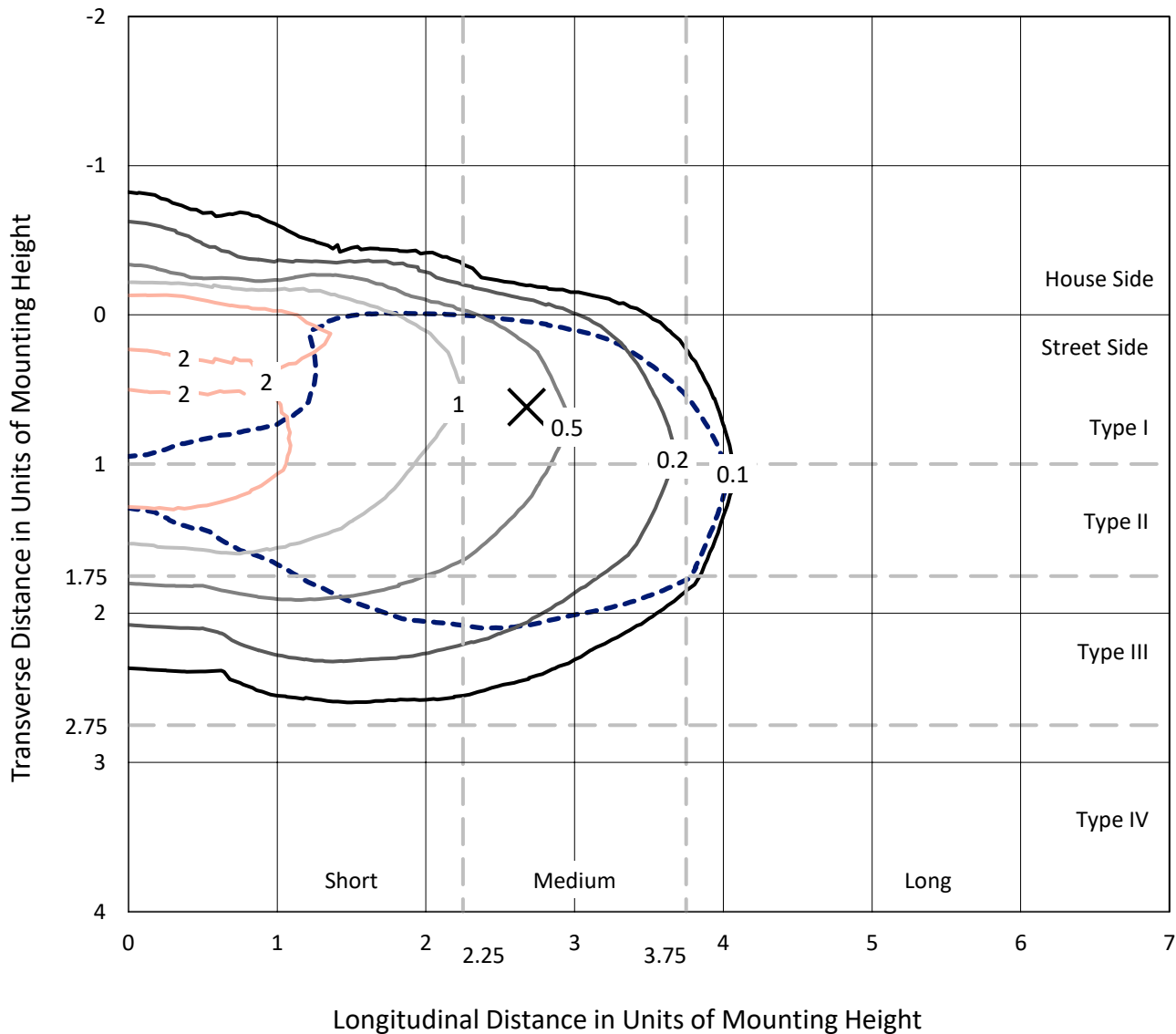
Input Watts (W): 100.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

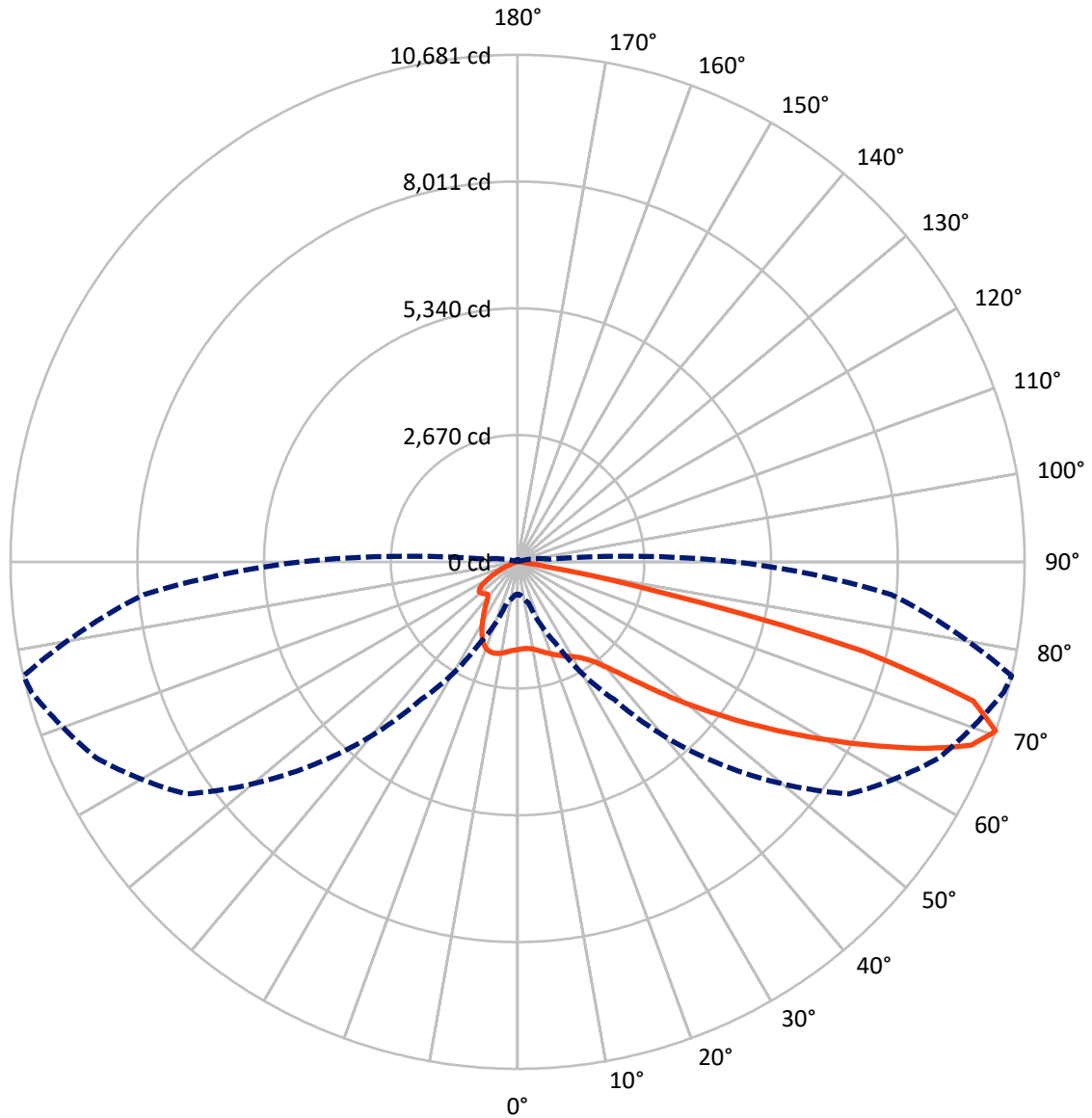
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.5 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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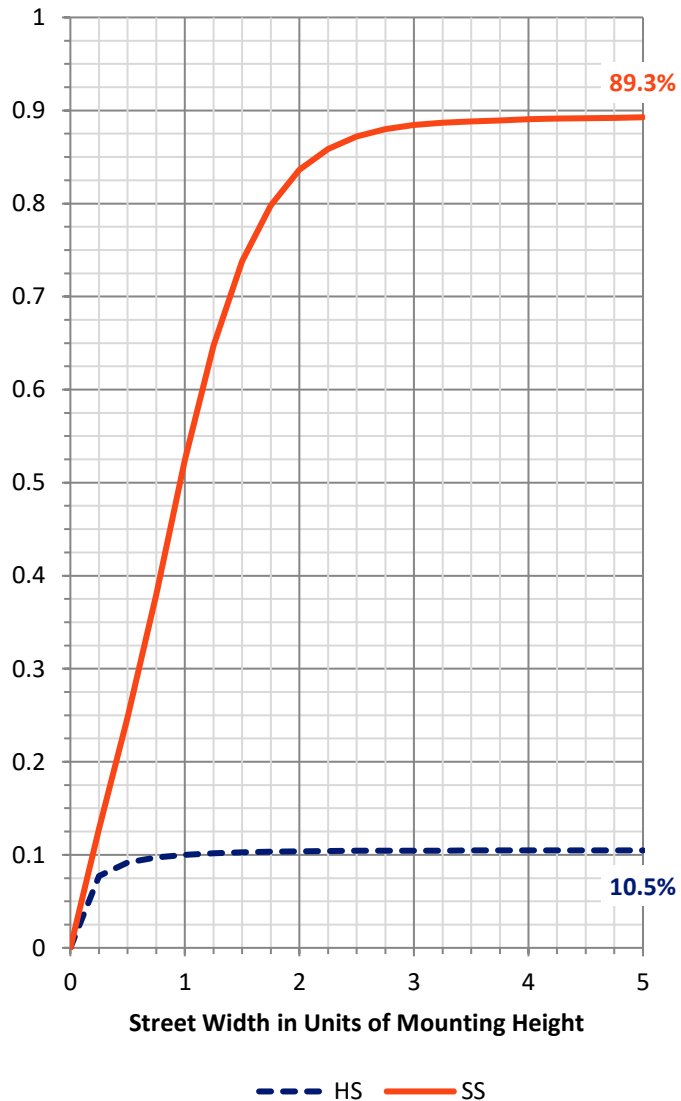
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1249.6	0.0	1249.6
	% Fixture	10.5	0.0	10.5
Street Side	Lumens	10604.5	0.0	10604.5
	% Fixture	89.5	0.0	89.5
Total	Lumens	11854.1	0.0	11854.1
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	159.4	1.3
10°-20°	378.3	3.2
20°-30°	585.1	4.9
30°-40°	1061.7	9.0
40°-50°	2004.1	16.9
50°-60°	2895.8	24.4
60°-70°	3082.5	26.0
70°-80°	1633.5	13.8
80°-90°	53.6	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°	11854.1	100.0
0°-180°	11854.1	100.0

Coefficient of Utilization

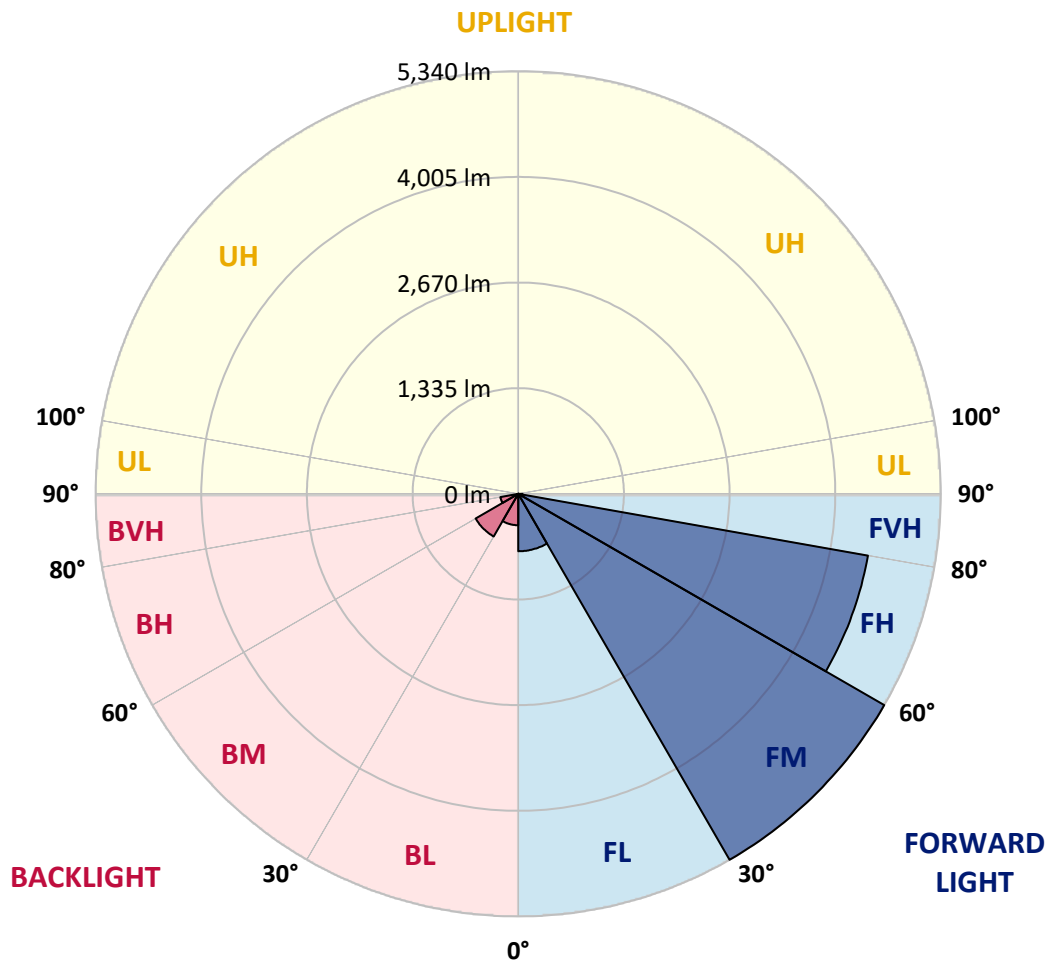


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	725.8	6.1			
FM (30°-60°)	5339.6	45.0			
FH (60°-80°)	4487.0	37.9			G2/5000
FVH (80°-90°)	52.2	0.4			G1/100
BL (0°-30°)	397.0	3.3	B1/500		
BM (30°-60°)	622.1	5.2	B1/1000		
BH (60°-80°)	229.1	1.9	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-G2
 Type III Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77°	85°
0°	1849.0	1849.0	1849.0	1849.0	1849.0	1849.0	1849.0	1849.0	1849.0	1849.0	1849.0
2.5°	1736.0	1751.7	1749.5	1759.9	1763.7	1778.7	1793.6	1813.8	1836.3	1835.6	1850.5
5°	1637.9	1653.6	1657.4	1671.6	1689.6	1712.8	1743.5	1783.9	1825.8	1832.6	1862.5
7.5°	1521.9	1538.3	1548.1	1576.6	1609.5	1657.4	1707.5	1766.7	1836.3	1846.0	1903.6
10°	1405.9	1420.9	1433.6	1473.9	1526.4	1597.5	1679.1	1764.4	1858.0	1872.3	1953.9
12.5°	1334.0	1348.2	1362.4	1397.6	1462.8	1549.6	1660.4	1774.9	1894.0	1914.2	2021.9
15°	1308.5	1321.2	1332.5	1364.0	1424.5	1523.4	1656.6	1796.6	1939.6	1966.6	2104.3
17.5°	1312.3	1319.1	1326.6	1350.4	1409.6	1511.4	1663.4	1834.0	1993.5	2017.5	2186.6
20°	1334.0	1337.7	1338.4	1354.9	1407.3	1509.9	1676.9	1870.0	2044.4	2076.6	2268.2
22.5°	1361.7	1363.1	1361.7	1372.9	1421.6	1521.1	1694.8	1913.4	2101.4	2131.3	2350.6
25°	1491.2	1462.8	1426.8	1405.1	1445.6	1542.8	1721.8	1971.8	2163.5	2192.7	2430.7
27.5°	1893.2	1811.6	1682.8	1538.3	1495.0	1574.3	1759.2	2030.9	2226.3	2252.5	2516.8
30°	2546.0	2438.9	2220.4	1894.7	1653.6	1640.2	1807.9	2090.1	2292.9	2321.4	2608.8
32.5°	3200.3	3174.0	2921.8	2471.1	2010.7	1786.9	1888.7	2170.1	2381.3	2403.7	2733.2
35°	3862.0	3808.9	3602.3	3156.8	2561.0	2085.6	2023.5	2275.0	2497.3	2522.7	2914.3
37.5°	4368.8	4336.6	4208.6	3841.8	3213.7	2546.7	2254.0	2437.4	2665.7	2694.2	3146.3
40°	4816.5	4801.5	4758.0	4516.3	3943.6	3150.1	2612.6	2689.0	2899.3	2933.0	3430.8
42.5°	5168.3	5203.5	5228.2	5160.8	4695.9	3838.8	3094.7	3042.3	3225.0	3259.4	3793.1
45°	5528.3	5540.3	5640.0	5737.2	5443.1	4558.9	3638.1	3456.3	3629.9	3672.6	4227.3
47.5°	5759.7	5807.6	5982.7	6154.2	6071.1	5273.1	4222.1	3945.1	4099.3	4179.4	4713.9
50°	5776.9	5867.5	6108.5	6407.3	6528.5	5952.8	4856.9	4502.0	4666.0	4754.4	5233.4
52.5°	5490.2	5630.9	6004.4	6441.6	6775.6	6528.5	5513.4	5059.0	5269.3	5384.6	5772.4
55°	4209.4	4393.5	5613.0	6254.5	6785.3	6965.0	6152.7	5639.1	5941.6	6071.9	6354.8
57.5°	3667.3	3760.2	4412.9	5929.6	6604.9	7140.9	6730.7	6191.6	6673.0	6834.7	6905.0
60°	3051.3	3173.3	3701.1	5398.2	6360.0	7158.1	7241.1	6904.3	7465.7	7647.6	7409.6
62.5°	2073.6	2206.1	2730.9	4484.8	6025.5	7149.8	7659.6	7637.9	8346.9	8542.2	7837.0
65°	1284.6	1367.7	1713.5	3662.1	5557.5	7158.8	8097.5	8528.7	9276.6	9475.0	8167.9
67.5°	1015.1	1053.3	1233.7	2811.7	4751.3	6956.7	8534.8	9366.4	10151.7	10308.9	8269.0
70°	681.9	705.2	897.6	1885.0	3534.8	6023.9	8526.5	9787.1	10602.4	10680.9	7900.7
72.5°	359.4	377.3	524.8	872.9	2135.0	4281.9	7187.3	9284.0	10154.0	10035.7	6753.1
75°	179.7	209.6	353.3	443.2	911.7	2388.0	4463.2	7319.7	7992.0	7533.9	4332.9
77.5°	136.2	164.7	291.9	291.9	317.4	804.0	1890.2	3992.3	3682.3	3066.3	1271.8
80°	86.8	112.3	255.2	220.8	132.5	204.4	492.6	1118.4	782.3	595.1	231.3
82.5°	50.9	73.4	212.6	146.0	74.1	75.6	139.2	238.0	202.8	158.0	71.1
85°	20.2	47.9	146.0	57.6	29.2	18.8	41.9	50.9	41.9	31.5	17.9
87.5°	0.0	11.3	25.4	0.0	2.3	1.5	3.0	3.8	3.8	3.0	5.9
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°	1849.0	1849.0	1849.0	1849.0	1849.0	1849.0	1849.0	1849.0	1849.0	1849.0	1849.0
2.5°	1857.3	1858.7	1863.2	1864.0	1853.5	1840.1	1834.9	1832.6	1823.6	1822.9	1824.3
5°	1879.7	1886.4	1879.7	1860.3	1813.8	1748.8	1699.3	1658.9	1622.2	1611.0	1604.2
7.5°	1924.6	1931.4	1911.1	1834.9	1718.0	1588.5	1471.7	1389.4	1315.3	1287.6	1276.3
10°	1989.0	1998.0	1934.4	1780.1	1573.6	1365.4	1167.8	1028.6	920.0	875.9	857.1
12.5°	2069.9	2073.6	1947.1	1697.1	1385.7	1088.4	808.5	659.5	562.9	527.1	515.8
15°	2159.0	2153.7	1948.6	1584.0	1129.7	769.6	527.8	433.5	394.5	382.5	382.5
17.5°	2252.5	2230.8	1918.7	1420.9	848.9	526.2	391.5	369.1	362.3	359.4	358.5
20°	2344.6	2295.9	1864.0	1207.4	609.4	393.0	355.6	348.8	345.1	343.6	342.1
22.5°	2428.4	2345.3	1770.4	959.7	442.4	347.4	336.1	330.2	323.4	320.4	319.7
25°	2510.0	2373.8	1638.7	728.4	354.0	324.9	315.9	304.6	295.7	291.9	290.5
27.5°	2589.4	2391.7	1473.9	538.9	315.9	303.9	287.4	271.7	265.0	263.5	262.0
30°	2674.0	2397.8	1286.8	402.0	292.7	277.8	253.8	235.9	232.1	232.8	232.8
32.5°	2777.2	2406.7	1098.2	329.3	273.3	246.3	217.8	199.2	196.1	199.2	198.3
35°	2900.9	2424.7	916.2	303.2	256.0	214.1	183.4	167.7	164.7	167.0	166.2
37.5°	3068.4	2453.8	746.3	298.0	241.8	187.2	154.2	141.4	141.4	142.3	141.4
40°	3291.6	2531.8	594.4	294.2	234.3	167.0	130.3	125.0	127.3	128.7	128.7
42.5°	3563.3	2697.2	491.8	289.7	226.1	158.0	118.3	116.0	119.8	121.3	121.3
45°	3867.9	2906.8	455.9	282.2	218.6	163.9	113.1	110.1	114.5	115.3	116.0
47.5°	4183.1	3111.9	451.4	274.0	211.2	172.9	111.5	104.8	110.1	110.8	111.5
50°	4502.0	3245.9	455.9	261.3	199.2	172.9	112.3	99.5	104.0	106.3	107.0
52.5°	4823.2	3307.3	452.9	233.6	178.1	162.5	112.3	95.1	99.5	101.1	101.1
55°	5134.6	3295.3	407.2	192.4	151.2	143.7	109.3	91.3	94.3	95.1	95.1
57.5°	5380.9	3128.4	322.7	149.8	122.8	119.8	99.5	86.8	89.1	88.4	88.4
60°	5509.7	2761.6	230.5	115.3	96.6	94.3	87.5	80.9	82.3	78.6	77.9
62.5°	5511.1	2276.5	154.2	91.3	77.1	74.8	74.8	72.6	71.1	63.7	61.4
65°	5393.7	1738.2	102.6	72.6	62.1	58.4	62.8	62.1	56.9	46.4	44.9
67.5°	5127.2	1139.4	77.9	56.9	47.9	45.7	50.1	52.4	48.7	38.9	38.1
70°	4579.2	663.3	64.4	44.2	36.0	33.7	40.4	44.9	40.4	31.5	29.9
72.5°	3803.6	357.8	52.4	32.9	24.7	22.4	32.2	36.7	32.2	23.2	22.4
75°	2468.1	191.7	40.4	21.7	12.7	14.2	24.0	27.0	22.4	15.0	13.4
77.5°	828.7	84.6	25.4	10.5	5.9	5.9	14.2	16.5	10.5	5.2	4.5
80°	184.9	35.2	10.5	4.5	2.3	2.3	3.0	3.0	1.5	0.0	0.0
82.5°	60.7	14.2	4.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	23.2	5.2	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	9.0	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)