

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: P961407

Luminaire Tested: **NAV-SB2A-735-U-T2R**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P961407
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-3)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB2A-735-U-T2R
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 70 CRI, 3500K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II
ROADWAY OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9365.4 lumens
Efficiency: N/A
Efficacy: 163.4 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B1 - U0 - G2

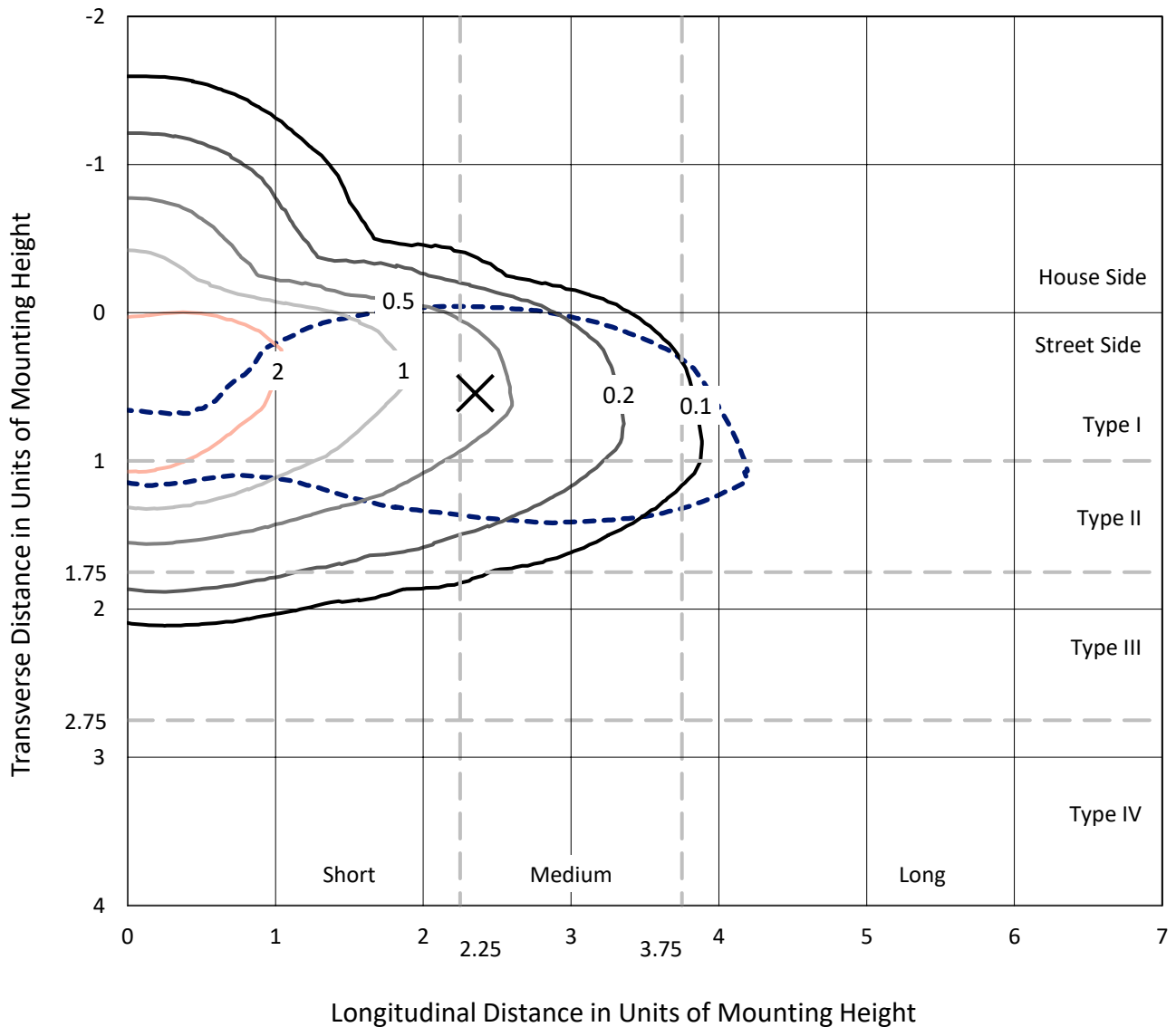
Input Watts (W): 57.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

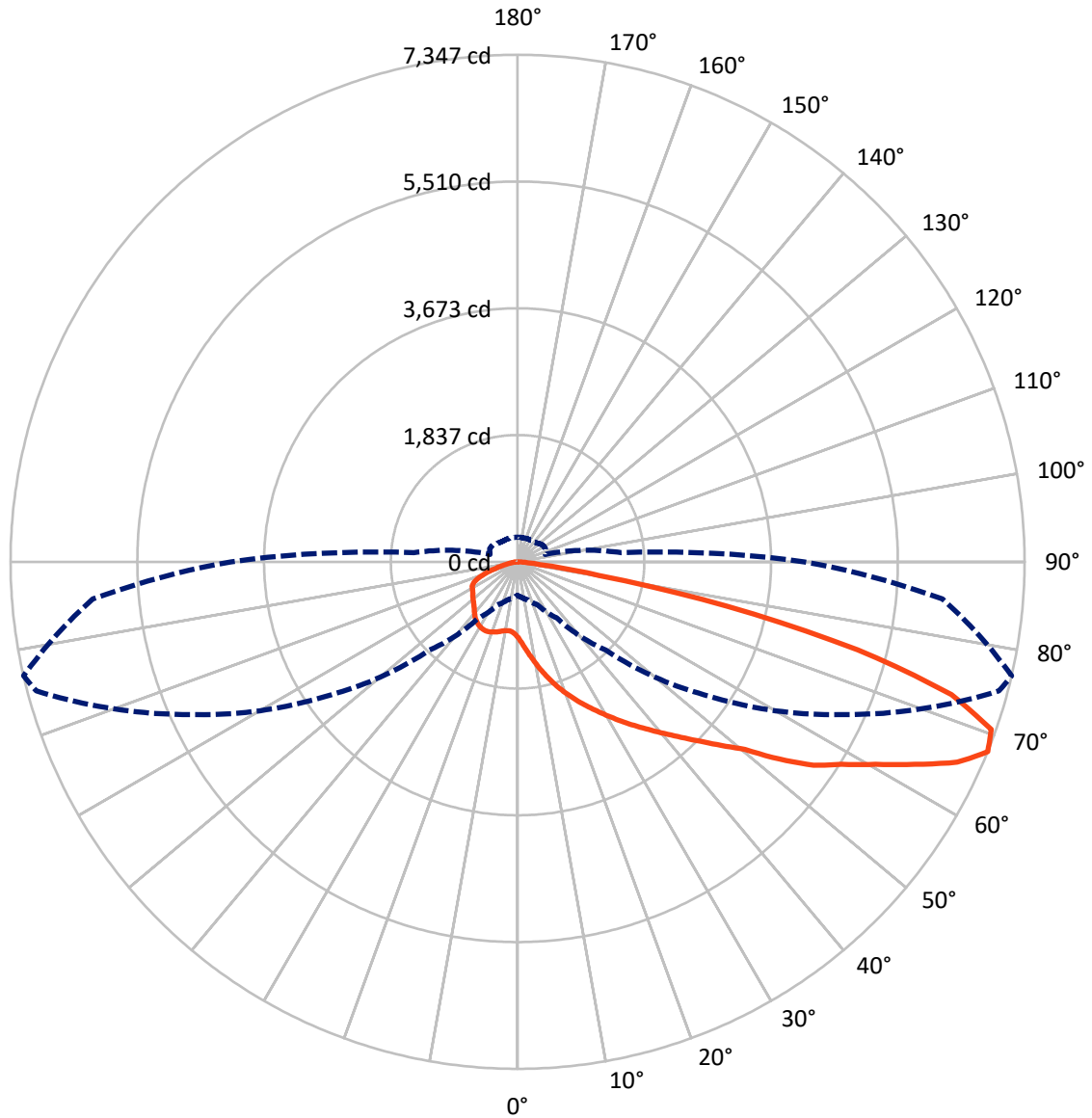
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.4 fc
 Type II - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 77-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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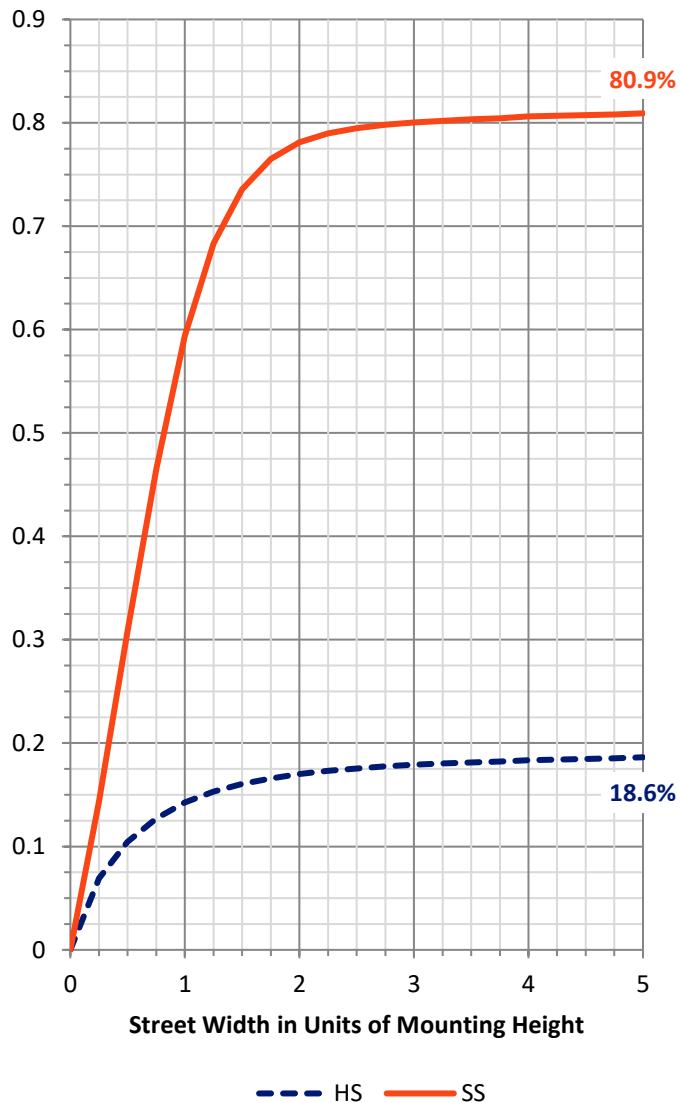
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1771.6	0.0	1771.6
	% Fixture	18.9	0.0	18.9
Street Side	Lumens	7593.9	0.0	7593.9
	% Fixture	81.1	0.0	81.1
Total	Lumens	9365.4	0.0	9365.4
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	117.8	1.3
10°-20°	423.1	4.5
20°-30°	798.9	8.5
30°-40°	1287.1	13.7
40°-50°	1760.5	18.8
50°-60°	1985.8	21.2
60°-70°	1853.5	19.8
70°-80°	1016.0	10.8
80°-90°	122.6	1.3
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°	9365.4	100.0
0°-180°	9365.4	100.0

Coefficient of Utilization

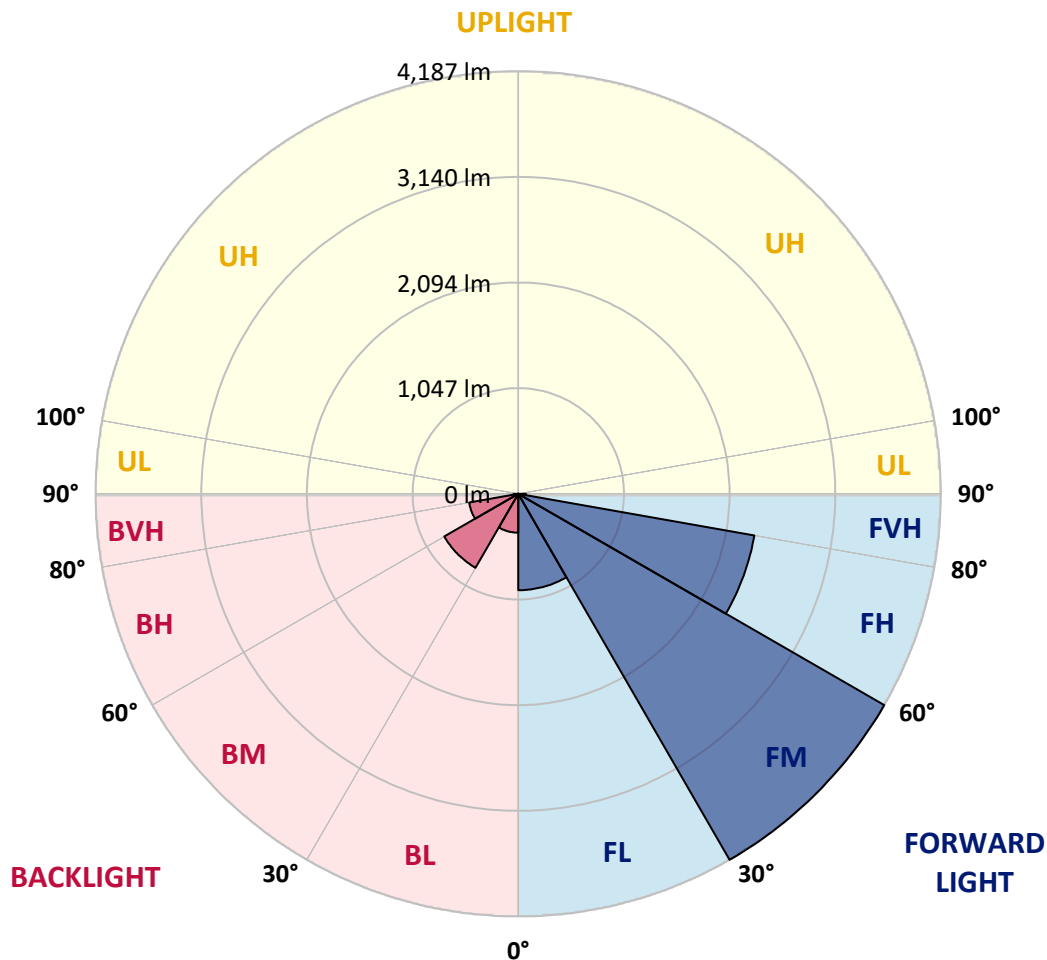


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	954.7	10.2			
FM (30°-60°)	4187.2	44.7			
FH (60°-80°)	2375.3	25.4			G2/5000
FVH (80°-90°)	76.6	0.8			G1/100
BL (0°-30°)	385.2	4.1	B1/500		
BM (30°-60°)	846.2	9.0	B1/1000		
BH (60°-80°)	494.2	5.3	B1/500		G1/500
BVH (80°-90°)	45.9	0.5			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2
 Type II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77°	85°
0°	1098.9	1098.9	1098.9	1098.9	1098.9	1098.9	1098.9	1098.9	1098.9	1098.9	1098.9
2.5°	1375.9	1385.5	1373.4	1373.4	1332.8	1311.6	1271.0	1240.0	1184.4	1174.8	1138.1
5°	1626.3	1638.4	1621.4	1614.2	1566.3	1522.3	1454.2	1387.0	1287.9	1277.8	1191.2
7.5°	1820.2	1835.6	1820.6	1812.9	1770.4	1721.1	1641.2	1547.4	1407.7	1388.0	1262.7
10°	1978.2	1980.6	1975.8	1978.8	1945.3	1904.8	1823.1	1713.8	1539.2	1512.2	1349.3
12.5°	2067.6	2078.8	2088.4	2105.9	2100.0	2074.9	2001.4	1870.9	1678.5	1643.7	1443.5
15°	2109.8	2129.0	2150.9	2190.9	2223.3	2229.6	2173.5	2039.6	1820.2	1778.1	1538.8
17.5°	2124.7	2143.1	2177.4	2235.4	2305.0	2352.0	2326.8	2203.5	1960.3	1912.0	1638.9
20°	2200.6	2205.9	2226.7	2281.9	2357.3	2435.1	2454.0	2361.1	2099.1	2044.5	1742.3
22.5°	2363.0	2352.4	2358.2	2383.3	2437.4	2512.9	2555.9	2500.4	2241.7	2178.8	1846.7
25°	2631.4	2600.4	2569.5	2540.5	2568.0	2610.6	2659.4	2639.6	2391.1	2311.3	1952.1
27.5°	2970.2	2932.5	2864.4	2769.1	2735.8	2750.8	2772.5	2768.6	2529.4	2448.6	2060.9
30°	3303.8	3259.8	3178.6	3040.9	2952.8	2913.2	2896.8	2885.7	2679.7	2593.7	2170.6
32.5°	3570.2	3535.4	3455.6	3301.4	3173.8	3106.1	3051.4	3011.9	2836.8	2750.8	2286.7
35°	3803.2	3770.8	3679.4	3511.2	3372.5	3300.4	3228.9	3144.3	3000.2	2913.2	2411.4
37.5°	4016.0	3983.6	3858.3	3683.3	3543.6	3493.8	3430.0	3286.5	3164.1	3082.0	2543.3
40°	4150.3	4143.0	4026.1	3827.9	3682.8	3658.2	3636.9	3451.3	3345.9	3269.4	2688.4
42.5°	4184.7	4200.6	4107.8	3944.8	3806.5	3786.8	3836.6	3637.8	3549.9	3476.9	2852.8
45°	4101.9	4147.9	4087.0	3976.3	3894.6	3883.9	4013.5	3841.9	3775.7	3709.0	3051.0
47.5°	3892.6	3970.4	3945.3	3929.8	3918.3	3964.2	4169.2	4058.5	4031.4	3973.4	3277.2
50°	3470.1	3617.5	3661.6	3759.2	3871.4	4026.5	4310.8	4294.9	4330.1	4271.7	3552.8
52.5°	2739.6	2942.7	3197.9	3442.6	3727.3	4005.8	4466.4	4634.2	4783.2	4751.2	3990.7
55°	2261.6	2352.9	2549.2	2997.8	3447.9	3918.3	4536.5	4908.3	5232.7	5204.2	4322.9
57.5°	1894.1	1975.8	2096.6	2471.4	3025.4	3719.6	4580.1	5075.6	5540.6	5537.8	4650.6
60°	1500.1	1586.6	1710.4	1975.8	2531.8	3376.4	4570.5	5266.1	5933.7	5957.9	5050.5
62.5°	1055.3	1150.6	1287.9	1535.4	2027.6	2931.6	4373.2	5403.9	6396.4	6462.1	5531.5
65°	693.7	756.6	860.1	1073.7	1510.7	2359.7	3996.6	5421.7	6891.4	7002.6	5983.0
67.5°	486.4	510.6	571.4	687.5	995.9	1809.5	3396.6	5236.6	7221.6	7346.8	6178.8
70°	379.5	391.5	422.5	468.9	625.6	1216.8	2602.8	4755.1	7151.0	7281.5	5974.3
72.5°	327.8	339.4	351.0	356.8	419.6	751.2	1763.1	3975.8	6486.3	6574.8	5194.5
75°	297.4	300.2	309.9	307.9	320.0	487.3	1017.6	2896.8	5117.7	5087.2	3834.6
77.5°	249.9	253.8	269.8	267.3	284.2	333.1	528.4	1869.5	3317.8	3110.9	2134.4
80°	211.8	213.7	231.0	228.2	247.0	241.3	269.8	952.8	1407.3	1192.2	615.4
82.5°	73.5	90.9	176.5	181.7	188.5	146.0	155.7	388.7	429.8	329.2	129.0
85°	35.8	38.2	89.9	127.6	127.1	73.5	75.8	138.8	135.4	106.4	43.0
87.5°	5.8	7.3	10.7	49.8	39.7	19.4	26.1	27.1	28.1	24.2	9.6
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°	1098.9	1098.9	1098.9	1098.9	1098.9	1098.9	1098.9	1098.9	1098.9	1098.9	1098.9
2.5°	1110.9	1086.8	1036.0	989.1	952.3	917.1	897.3	880.4	870.6	868.7	868.7
5°	1140.9	1091.1	998.8	921.0	870.2	832.5	812.6	800.1	793.8	790.0	789.5
7.5°	1184.0	1110.9	979.5	890.9	837.8	810.8	800.5	798.7	798.2	798.7	800.1
10°	1243.4	1143.3	977.5	883.8	839.3	824.3	823.8	824.3	826.2	826.7	827.2
12.5°	1307.7	1176.7	985.2	890.0	857.6	849.4	848.0	847.5	848.9	849.9	850.3
15°	1377.8	1220.7	998.4	903.5	877.9	869.2	867.8	864.9	864.4	863.9	863.5
17.5°	1449.9	1264.2	1012.8	918.1	890.9	878.9	873.6	866.8	861.5	860.1	861.5
20°	1522.8	1307.2	1023.0	925.3	892.0	875.0	864.4	852.8	843.6	838.2	840.2
22.5°	1600.6	1352.2	1029.2	923.3	883.2	860.1	840.7	827.2	813.1	803.9	804.4
25°	1676.6	1391.3	1028.8	913.2	866.3	836.8	812.2	794.8	775.4	765.8	765.8
27.5°	1749.6	1426.6	1016.7	895.3	842.1	809.2	779.8	759.0	740.2	730.9	730.5
30°	1825.0	1456.1	997.8	869.2	813.6	777.4	745.0	727.1	710.1	701.5	701.0
32.5°	1899.9	1483.2	971.2	836.8	780.7	746.0	714.0	697.6	687.5	687.5	688.0
35°	1979.2	1502.0	935.9	799.1	746.0	712.6	687.5	677.7	676.8	671.0	669.5
37.5°	2062.8	1514.1	892.9	760.4	711.7	680.2	672.5	660.8	651.2	638.6	636.7
40°	2150.9	1526.2	841.2	720.4	675.4	657.9	654.6	639.1	611.5	580.6	576.3
42.5°	2257.7	1534.4	787.5	680.2	637.1	631.4	636.2	609.6	565.6	542.4	542.9
45°	2381.4	1548.0	738.2	640.5	598.0	598.0	618.3	583.5	547.2	532.8	535.2
47.5°	2541.9	1579.4	692.3	597.1	561.8	571.4	578.7	552.1	531.8	513.9	513.4
50°	2774.0	1654.8	644.9	553.1	534.2	553.5	543.4	527.9	504.2	489.7	488.3
52.5°	3062.1	1699.2	602.8	513.4	510.6	529.8	515.4	500.8	483.0	463.6	459.7
55°	3258.4	1707.5	567.5	484.4	494.6	492.6	487.3	474.3	464.6	439.0	439.4
57.5°	3477.8	1723.9	538.5	467.0	484.4	463.1	461.2	450.1	437.5	420.1	414.3
60°	3740.3	1749.6	513.4	460.2	475.7	443.8	434.1	429.8	417.2	408.5	410.9
62.5°	4026.5	1772.7	487.8	461.2	465.6	425.0	410.4	409.0	401.3	398.3	398.3
65°	4221.9	1709.4	455.9	460.2	449.6	405.6	387.2	386.7	380.5	379.5	379.0
67.5°	4153.7	1508.8	412.9	446.7	433.2	386.2	365.9	364.1	355.8	356.3	356.3
70°	3812.4	1222.6	353.4	413.4	412.9	368.9	343.7	337.4	326.4	328.2	330.2
72.5°	3172.3	906.0	273.7	357.7	380.5	352.9	318.1	307.9	294.0	295.8	295.4
75°	2291.0	615.9	199.2	272.1	331.2	334.0	292.9	275.5	258.6	261.6	262.5
77.5°	1172.3	349.0	146.5	187.6	260.0	303.6	270.3	247.0	243.1	270.3	266.4
80°	382.4	175.0	101.5	131.5	170.7	248.5	236.9	210.3	209.3	215.7	185.1
82.5°	114.1	74.0	65.3	86.5	94.3	190.4	204.5	159.1	136.8	144.1	148.9
85°	39.2	35.8	37.2	43.0	45.0	111.7	143.1	105.4	99.6	109.8	108.2
87.5°	9.2	12.6	10.7	9.6	9.6	27.1	55.6	44.0	60.9	40.6	39.2
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)