

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: P967636

Luminaire Tested: **NAV-SB5A-722-U-T2-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P967636
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-4)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB5A-722-U-T2-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 70 CRI, 2200K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 14010.7 lumens
Efficiency: N/A
Efficacy: 98.9 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B2 - U0 - G2

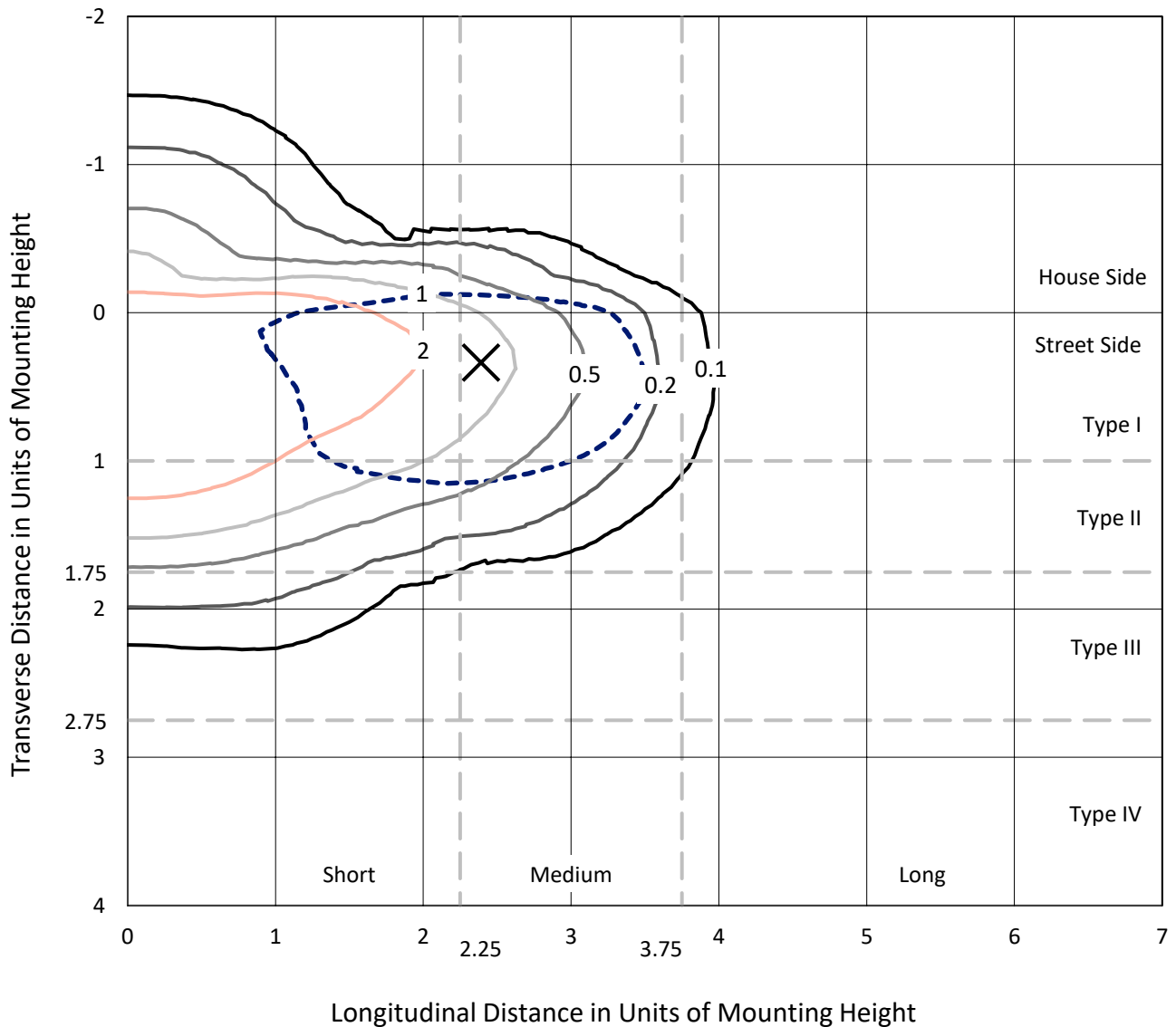
Input Watts (W): 141.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P967636
 CATALOG NUMBER: NAV-SB5A-722-U-T2-HSS

Iso-Footcandle Lines of Horizontal Illumination

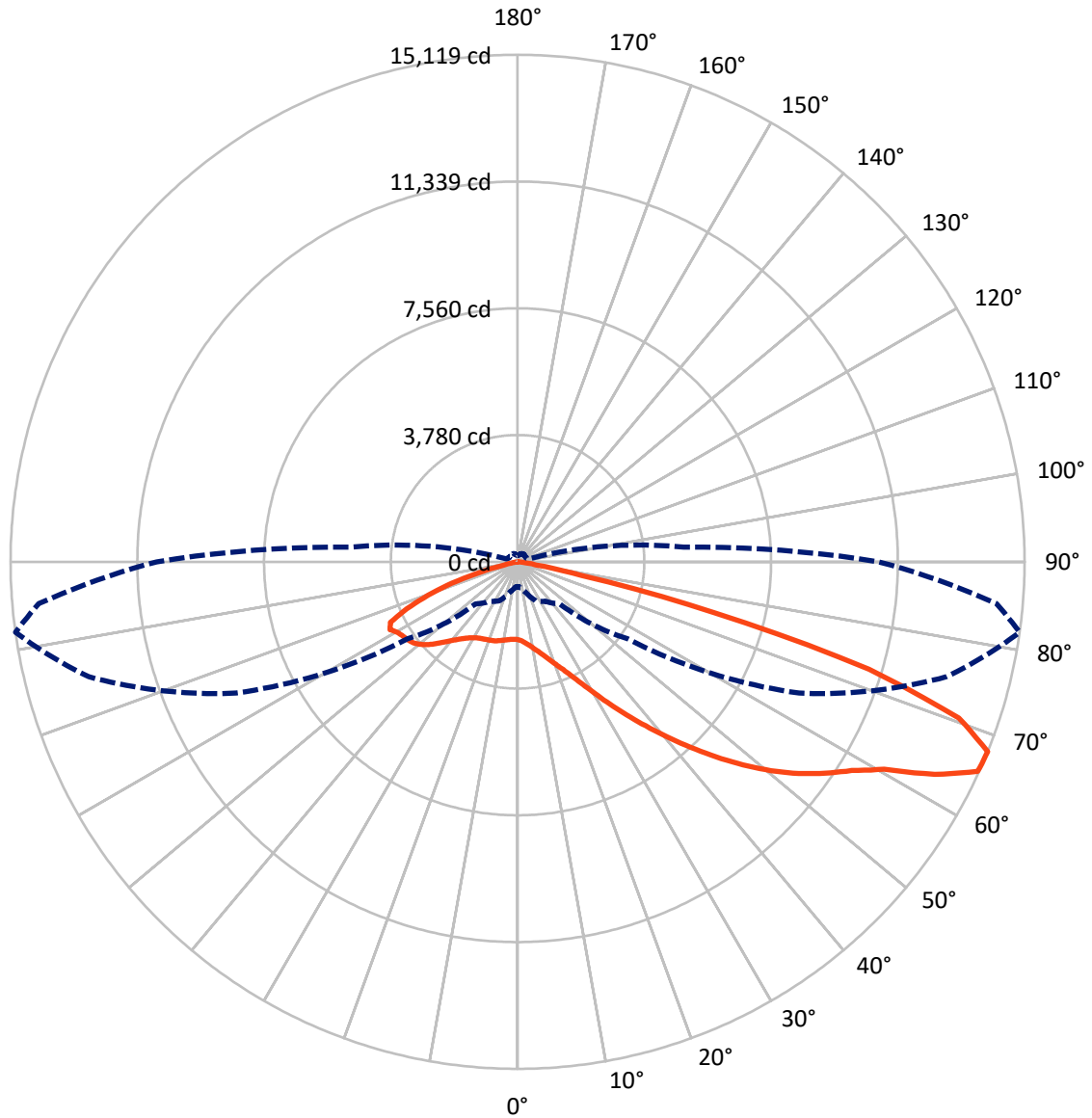
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.9 fc
 Type II - Medium - N/A

REPORT NUMBER: P967636
CATALOG NUMBER: NAV-SB5A-722-U-T2-HSS

Luminous Intensity Polar Plot



— Vertical Plane Through 82-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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 CATALOG NUMBER: NAV-SB5A-722-U-T2-HSS

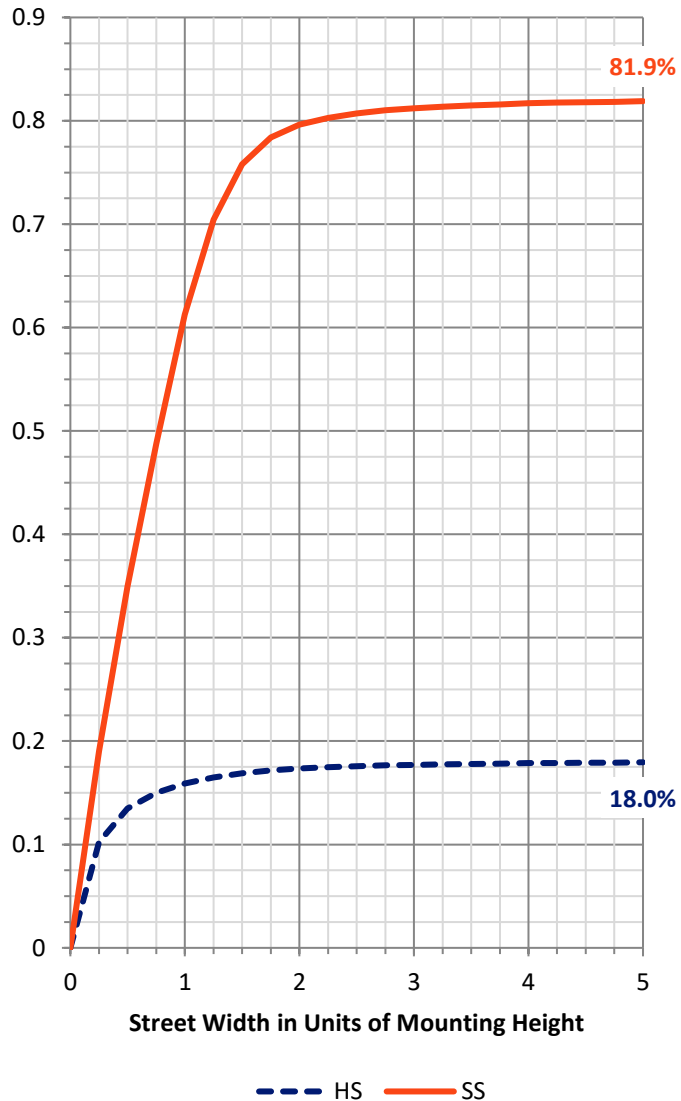
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2537.9	0.0	2537.9
	% Fixture	18.1	0.0	18.1
Street Side	Lumens	11472.8	0.0	11472.8
	% Fixture	81.9	0.0	81.9
Total	Lumens	14010.7	0.0	14010.7
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	206.8	1.5
10°-20°	537.4	3.8
20°-30°	860.7	6.1
30°-40°	1522.0	10.9
40°-50°	2666.7	19.0
50°-60°	3556.6	25.4
60°-70°	3311.0	23.6
70°-80°	1270.8	9.1
80°-90°	78.9	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°	14010.7	100.0
0°-180°	14010.7	100.0

Coefficient of Utilization



REPORT NUMBER: P967636

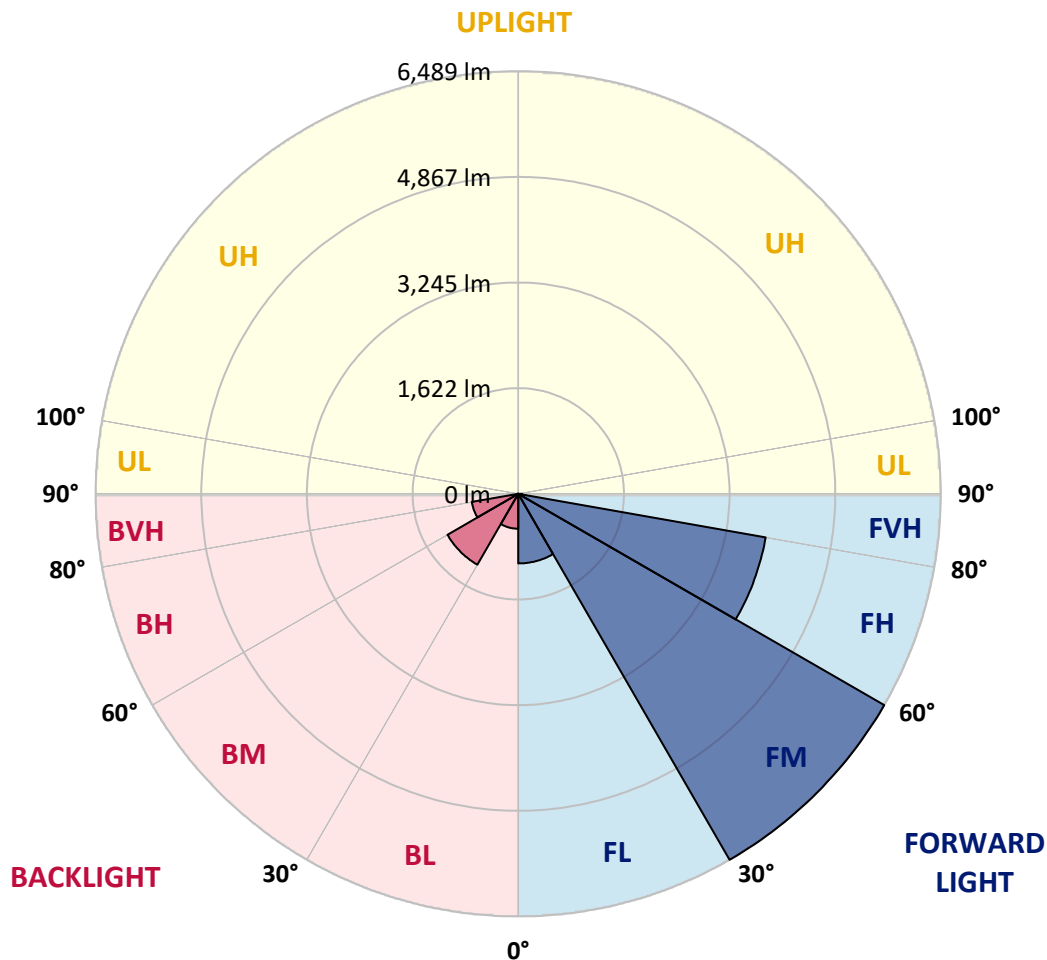
CATALOG NUMBER: NAV-SB5A-722-U-T2-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1068.9	7.6			
FM (30°-60°)	6489.2	46.3			
FH (60°-80°)	3857.4	27.5			G2/5000
FVH (80°-90°)	57.4	0.4			G1/100
BL (0°-30°)	536.0	3.8	B2/1000		
BM (30°-60°)	1256.0	9.0	B2/2500		
BH (60°-80°)	724.4	5.2	B2/1000		G2/1000
BVH (80°-90°)	21.5	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



REPORT NUMBER: P967636
 CATALOG NUMBER: NAV-SB5A-722-U-T2-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	2321.1	2321.1	2321.1	2321.1	2321.1	2321.1	2321.1	2321.1	2321.1	2321.1	2321.1
2.5°	2453.2	2467.4	2459.3	2455.3	2448.2	2438.2	2430.1	2404.9	2378.6	2361.5	2355.4
5°	2502.6	2516.8	2515.8	2519.9	2524.9	2527.9	2525.9	2497.6	2460.3	2431.1	2413.9
7.5°	2460.3	2476.4	2489.5	2509.7	2545.1	2582.4	2600.5	2594.5	2556.1	2515.8	2494.6
10°	2340.3	2357.4	2388.7	2436.1	2510.7	2591.4	2659.1	2690.3	2666.1	2621.7	2592.4
12.5°	2120.3	2137.5	2199.0	2301.9	2427.0	2567.2	2696.4	2780.1	2786.2	2741.8	2707.4
15°	1873.2	1890.4	1955.9	2085.1	2275.7	2500.7	2716.6	2874.9	2928.3	2890.0	2848.7
17.5°	1719.8	1735.0	1784.4	1888.4	2087.1	2367.5	2709.5	2975.8	3097.9	3067.5	3018.1
20°	1673.5	1686.6	1709.8	1782.5	1947.9	2229.3	2663.1	3070.6	3280.4	3263.3	3207.7
22.5°	1722.9	1735.0	1742.1	1774.4	1878.3	2138.6	2604.5	3167.5	3492.3	3494.2	3426.7
25°	1836.9	1849.0	1840.9	1861.1	1906.5	2110.3	2582.4	3281.4	3758.6	3780.7	3704.0
27.5°	2024.6	2025.5	2006.3	2005.4	2012.4	2152.6	2605.5	3403.5	4094.5	4135.8	4041.0
30°	2400.8	2385.7	2312.0	2232.3	2196.1	2279.7	2670.1	3547.7	4490.9	4564.5	4445.5
32.5°	2980.8	2958.7	2823.5	2632.8	2441.1	2484.5	2786.2	3712.1	4922.7	5055.8	4910.6
35°	3610.3	3604.2	3463.0	3179.5	2844.7	2776.0	2974.8	3928.0	5393.8	5605.5	5433.0
37.5°	4195.3	4192.4	4111.6	3777.7	3370.2	3182.5	3277.3	4210.5	5898.1	6204.7	6001.0
40°	4730.0	4739.1	4658.3	4359.7	3949.2	3704.0	3689.0	4559.5	6458.9	6857.4	6615.2
42.5°	5191.9	5202.1	5120.4	4899.4	4521.2	4281.1	4194.3	4987.2	7006.7	7558.5	7272.0
45°	5505.7	5568.2	5556.1	5379.6	5108.3	4859.1	4801.6	5523.8	7631.1	8301.9	7966.0
47.5°	5594.4	5652.0	5742.8	5767.0	5601.5	5356.3	5425.0	6170.4	8262.5	9046.3	8664.0
50°	5375.5	5429.0	5617.6	5868.8	5983.8	5908.2	6031.2	6863.4	8909.2	9788.8	9348.9
52.5°	4943.8	4998.3	5236.3	5633.8	6102.8	6341.0	6639.5	7546.4	9535.6	10491.9	9997.5
55°	4319.5	4377.0	4682.5	5132.5	5875.9	6519.5	7146.9	8228.3	10109.6	11124.3	10582.6
57.5°	3470.0	3512.5	3830.2	4459.7	5305.0	6341.9	7521.1	8972.7	10650.3	11745.7	11162.7
60°	2261.6	2298.9	2668.1	3370.2	4358.7	5748.8	7595.8	9802.9	11368.5	12553.7	11944.4
62.5°	1504.0	1529.2	1748.1	2263.6	3069.6	4609.9	7159.0	10465.7	12421.6	13959.9	13285.0
65°	1032.0	1057.2	1276.0	1635.2	1983.2	3049.4	5903.1	10377.9	13375.8	15076.6	14278.7
67.5°	736.4	757.6	943.2	1282.1	1435.4	1771.3	4001.7	9256.2	13238.7	15119.0	14332.2
70°	527.6	539.7	693.0	998.7	1140.9	1064.3	2225.3	7079.3	11591.4	13960.9	13240.6
72.5°	369.2	373.2	481.1	760.6	918.9	776.7	1059.1	4719.9	8766.9	10957.9	10264.9
75°	250.2	255.2	323.8	557.8	737.4	593.2	560.9	2530.9	5146.5	6065.5	5437.1
77.5°	153.3	155.4	208.8	381.3	551.8	451.9	361.1	1072.3	1991.3	1955.0	1666.4
80°	86.7	86.7	133.1	237.1	376.3	291.5	253.2	455.9	630.5	553.8	488.2
82.5°	48.4	49.4	96.9	147.3	249.2	172.5	139.2	210.8	272.3	241.1	209.8
85°	20.2	22.2	59.6	69.6	119.0	85.8	56.5	88.8	100.9	89.8	65.6
87.5°	2.0	3.1	18.1	13.1	14.1	17.1	8.1	17.1	14.1	14.1	10.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

REPORT NUMBER: P967636
 CATALOG NUMBER: NAV-SB5A-722-U-T2-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2321.1	2321.1	2321.1	2321.1	2321.1	2321.1	2321.1	2321.1	2321.1	2321.1	2321.1
2.5°	2336.3	2321.1	2282.8	2238.4	2179.9	2151.7	2113.3	2087.1	2064.9	2066.9	2046.7
5°	2381.6	2343.3	2257.6	2150.7	2017.5	1922.7	1821.7	1752.1	1695.7	1683.6	1656.3
7.5°	2444.2	2383.6	2233.4	2040.7	1815.7	1645.2	1492.9	1395.1	1325.5	1303.3	1281.0
10°	2524.9	2437.1	2202.1	1902.5	1578.7	1361.8	1198.4	1121.8	1074.3	1058.2	1046.0
12.5°	2618.7	2498.6	2160.7	1734.0	1334.6	1125.8	1021.8	983.5	968.4	963.3	960.3
15°	2736.7	2575.3	2098.2	1534.3	1127.8	981.5	937.2	932.0	934.1	932.0	931.1
17.5°	2876.9	2659.1	1996.3	1328.5	988.6	907.8	891.7	895.7	900.8	899.7	897.8
20°	3030.2	2741.8	1866.1	1145.9	893.7	855.4	846.3	850.3	854.4	852.4	851.4
22.5°	3204.8	2830.5	1721.9	1003.7	830.1	807.0	796.9	797.9	797.9	793.9	791.8
25°	3413.6	2928.3	1570.6	902.8	781.8	763.6	751.5	747.4	741.4	729.3	727.3
27.5°	3662.7	3032.3	1425.4	832.2	743.4	726.3	712.2	702.1	687.0	666.8	664.7
30°	3943.2	3158.3	1302.3	787.8	713.2	696.1	679.9	664.7	642.6	617.4	615.3
32.5°	4273.0	3293.5	1212.5	758.6	685.9	667.8	648.6	630.5	606.3	581.1	582.0
35°	4666.4	3456.9	1160.1	738.4	664.7	640.5	619.4	599.2	581.1	558.8	556.8
37.5°	5093.1	3630.4	1143.9	728.3	650.7	613.4	589.1	575.0	573.0	559.9	558.8
40°	5560.1	3836.3	1156.0	722.2	635.5	587.1	560.9	557.8	562.8	539.7	540.7
42.5°	6054.5	4080.3	1176.2	715.2	614.3	560.9	535.7	535.7	531.6	499.3	499.3
45°	6589.1	4361.8	1196.4	698.0	589.1	534.6	515.5	508.4	491.3	460.0	459.0
47.5°	7127.7	4648.3	1211.4	666.8	558.8	512.4	495.3	479.2	454.0	425.7	424.7
50°	7639.1	4905.4	1195.4	620.3	524.5	491.3	473.1	450.9	423.6	404.5	401.5
52.5°	8096.2	5128.4	1126.8	565.9	488.2	469.0	452.9	429.7	407.5	387.3	385.3
55°	8493.6	5309.0	1005.7	514.4	455.9	449.9	433.8	404.5	374.2	357.1	355.1
57.5°	8874.9	5446.1	854.4	472.1	426.7	428.8	404.5	378.2	350.0	331.9	329.8
60°	9382.2	5629.7	701.1	432.8	395.4	401.5	375.3	356.1	320.8	297.6	294.6
62.5°	10193.3	5915.3	556.8	384.4	359.2	361.1	350.0	326.9	284.4	257.3	255.2
65°	10836.8	5810.3	438.8	331.9	317.8	320.8	320.8	295.6	250.2	218.9	215.9
67.5°	10764.2	4975.0	350.0	280.4	278.4	280.4	287.5	266.3	221.9	196.7	192.7
70°	9915.8	3957.3	280.4	233.0	242.1	237.1	257.3	243.1	199.8	174.6	171.5
72.5°	8091.0	2850.7	213.8	192.7	185.6	193.7	232.1	218.9	166.5	138.2	135.2
75°	4727.9	1521.2	159.4	152.3	134.2	161.4	205.8	186.7	127.1	101.9	98.8
77.5°	1539.3	530.6	117.1	111.9	99.8	130.2	175.5	157.3	103.9	80.7	77.7
80°	412.6	160.4	79.6	73.6	64.6	96.9	139.2	125.0	74.6	52.5	51.5
82.5°	165.4	67.5	46.4	41.3	35.3	66.6	110.0	100.9	55.5	33.3	33.3
85°	53.5	22.2	17.1	13.1	16.1	41.3	65.6	68.6	39.4	17.1	13.1
87.5°	7.1	3.1	3.1	4.0	3.1	7.1	20.2	19.2	11.1	2.0	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)