

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: P966055

Luminaire Tested: **NAV-SB4B-722-U-T2-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P966055
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-SB4B-722-U-T2-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(4) 70 CRI, 2200K, 450mA 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: 13954.4 lumens
Efficiency: N/A
Efficacy: 94.9 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B2 - U0 - G2

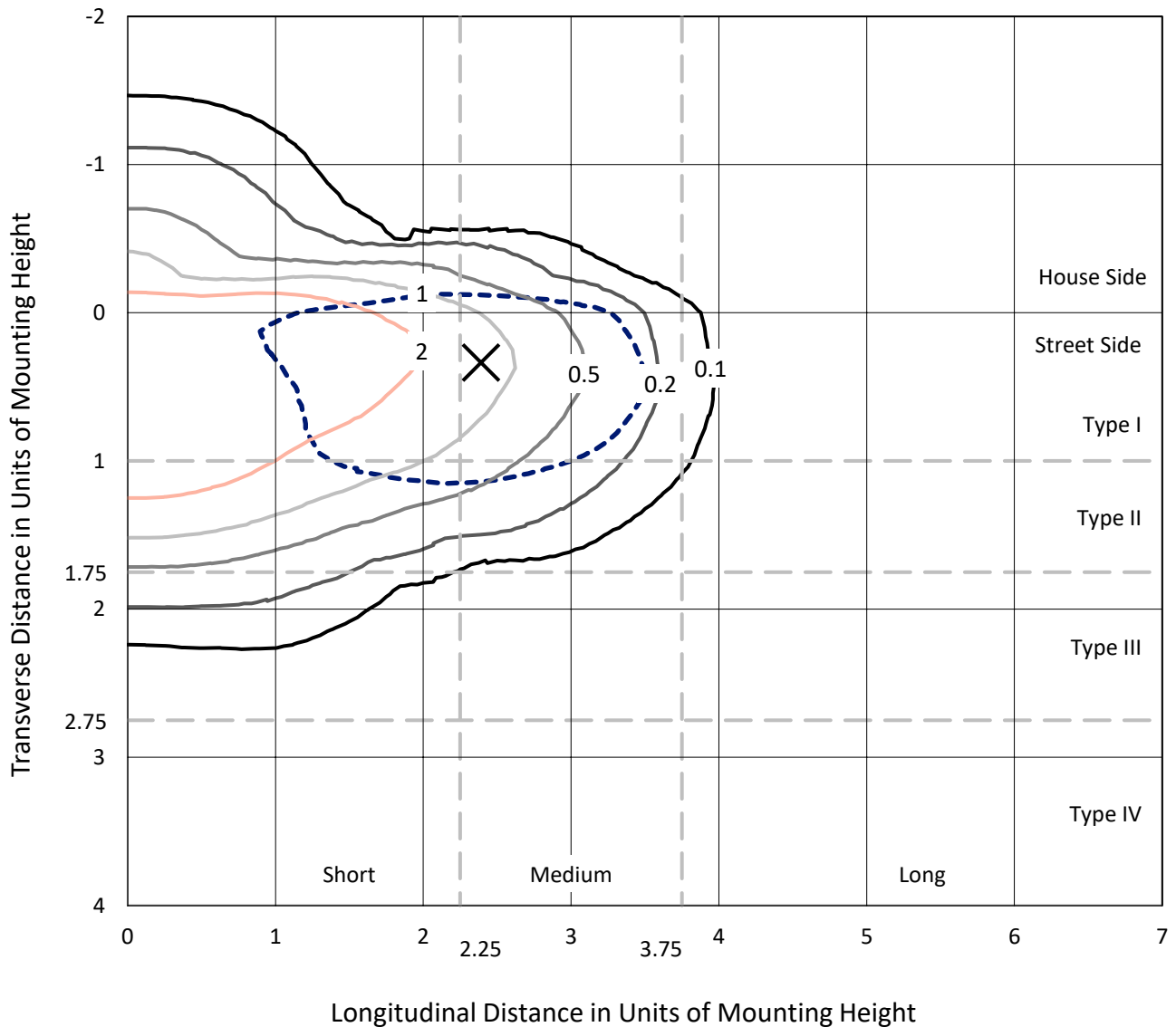
Input Watts (W): 147
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

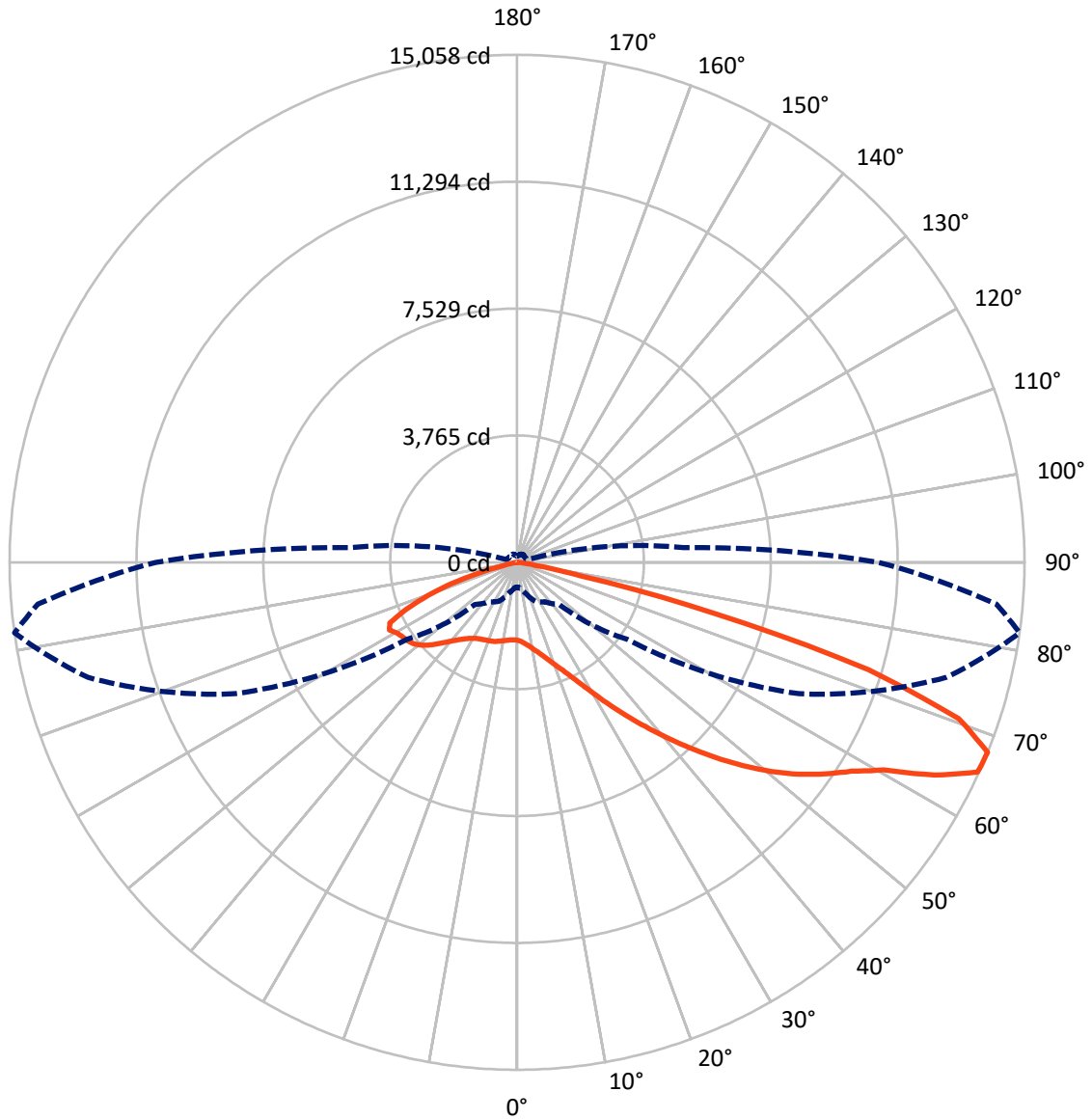
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.9 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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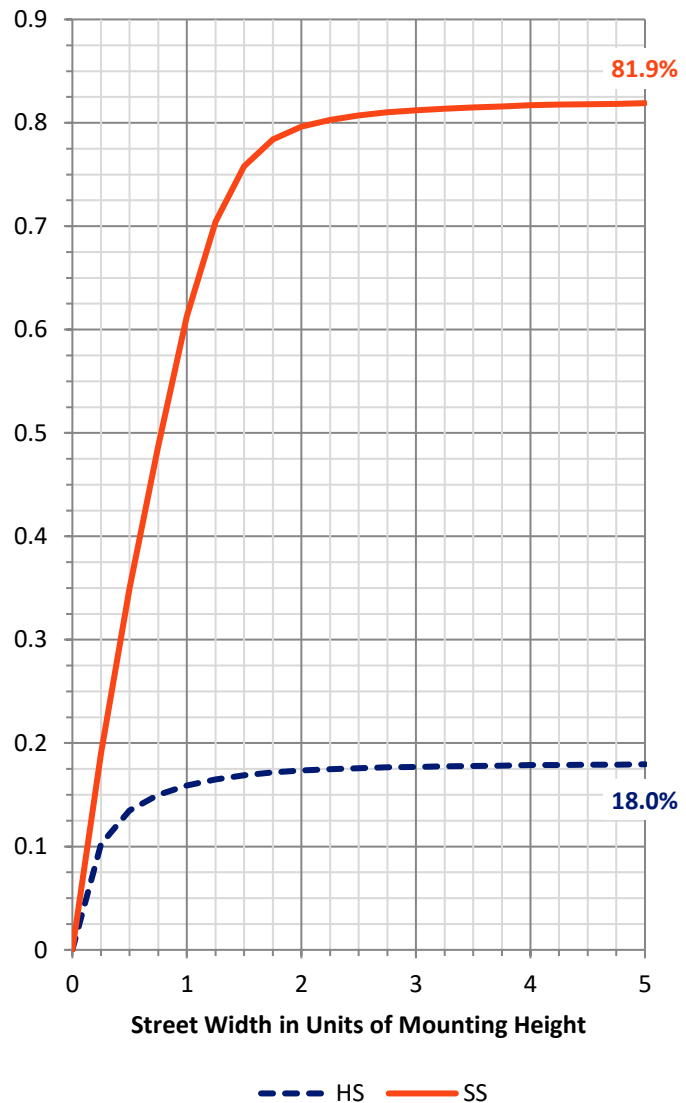
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2527.7	0.0	2527.7
	% Fixture	18.1	0.0	18.1
Street Side	Lumens	11426.7	0.0	11426.7
	% Fixture	81.9	0.0	81.9
Total	Lumens	13954.4	0.0	13954.4
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	206.0	1.5
10°-20°	535.2	3.8
20°-30°	857.2	6.1
30°-40°	1515.9	10.9
40°-50°	2655.9	19.0
50°-60°	3542.3	25.4
60°-70°	3297.7	23.6
70°-80°	1265.6	9.1
80°-90°	78.6	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°	13954.4	100.0
0°-180°	13954.4	100.0

Coefficient of Utilization

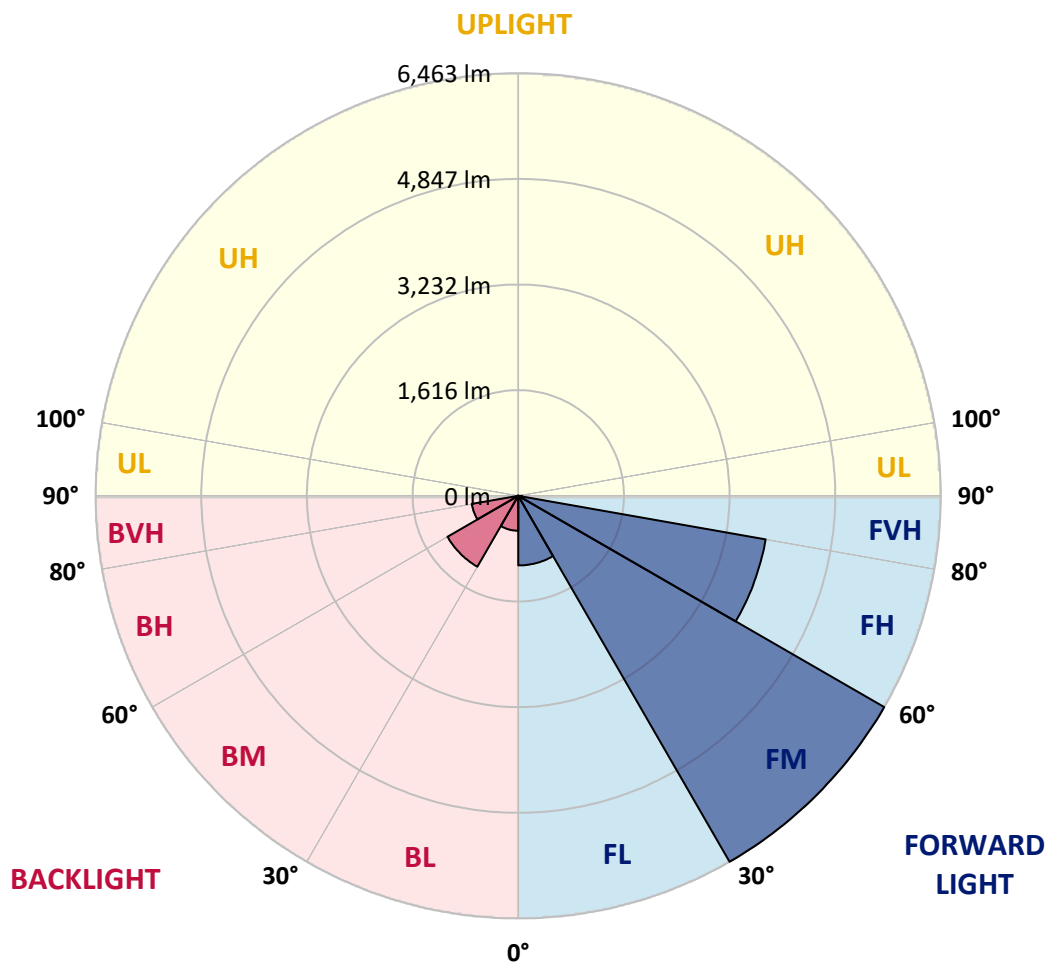


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1064.6	7.6			
FM (30°-60°)	6463.1	46.3			
FH (60°-80°)	3841.9	27.5			G2/5000
FVH (80°-90°)	57.1	0.4			G1/100
BL (0°-30°)	533.8	3.8	B2/1000		
BM (30°-60°)	1251.0	9.0	B2/2500		
BH (60°-80°)	721.5	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



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	2311.8	2311.8	2311.8	2311.8	2311.8	2311.8	2311.8	2311.8	2311.8	2311.8	2311.8
2.5°	2443.4	2457.4	2449.4	2445.3	2438.4	2428.3	2420.2	2395.1	2369.0	2352.0	2345.9
5°	2492.6	2506.6	2505.7	2509.7	2514.7	2517.7	2515.8	2487.6	2450.4	2421.3	2404.2
7.5°	2450.4	2466.5	2479.6	2499.7	2534.8	2571.9	2590.1	2584.0	2545.9	2505.7	2484.6
10°	2330.8	2348.0	2379.1	2426.3	2500.7	2581.1	2648.3	2679.5	2655.4	2611.2	2582.0
12.5°	2111.8	2128.9	2190.2	2292.7	2417.3	2556.9	2685.5	2768.9	2774.9	2730.7	2696.6
15°	1865.7	1882.7	1948.1	2076.6	2266.6	2490.5	2705.6	2863.3	2916.5	2878.4	2837.2
17.5°	1713.0	1728.0	1777.2	1880.8	2078.7	2358.0	2698.5	2963.8	3085.4	3055.2	3006.0
20°	1666.8	1679.8	1702.9	1775.3	1940.0	2220.4	2652.4	3058.2	3267.2	3250.2	3194.9
22.5°	1716.0	1728.0	1735.1	1767.2	1870.7	2130.0	2594.1	3154.6	3478.2	3480.2	3412.8
25°	1829.5	1841.6	1833.5	1853.6	1898.8	2101.8	2571.9	3268.2	3743.4	3765.5	3689.2
27.5°	2016.4	2017.4	1998.3	1997.3	2004.3	2144.0	2595.1	3389.8	4078.0	4119.2	4024.8
30°	2391.1	2376.1	2302.8	2223.3	2187.1	2270.6	2659.4	3533.5	4472.8	4546.2	4427.6
32.5°	2968.8	2946.7	2812.1	2622.3	2431.3	2474.6	2774.9	3697.2	4902.8	5035.4	4890.8
35°	3595.7	3589.8	3449.0	3166.7	2833.2	2764.8	2962.8	3912.2	5372.0	5583.0	5411.2
37.5°	4178.4	4175.4	4095.1	3762.5	3356.7	3169.7	3264.2	4193.5	5874.4	6179.7	5976.9
40°	4710.9	4720.0	4639.6	4342.2	3933.3	3689.2	3674.1	4541.2	6433.0	6829.8	6588.7
42.5°	5171.1	5181.2	5099.8	4879.7	4502.9	4263.9	4177.5	4967.2	6978.5	7528.0	7242.8
45°	5483.5	5545.9	5533.8	5358.0	5087.7	4839.5	4782.2	5501.6	7600.4	8268.5	7933.9
47.5°	5571.9	5629.2	5719.6	5743.8	5579.0	5334.8	5403.2	6145.6	8229.3	9010.0	8629.2
50°	5353.9	5407.2	5595.1	5845.2	5959.8	5884.4	6007.0	6835.8	8873.3	9749.4	9311.3
52.5°	4923.9	4978.2	5215.3	5611.2	6078.2	6315.4	6612.8	7516.0	9497.2	10449.7	9957.4
55°	4302.0	4359.3	4663.8	5111.8	5852.2	6493.3	7118.1	8195.2	10068.9	11079.6	10540.1
57.5°	3456.1	3498.3	3814.7	4441.6	5283.6	6316.5	7490.9	8936.6	10607.4	11698.4	11117.8
60°	2252.4	2289.6	2657.4	3356.7	4341.2	5725.6	7565.2	9763.4	11322.8	12503.3	11896.4
62.5°	1497.9	1523.0	1741.1	2254.5	3057.3	4591.4	7130.2	10423.5	12371.6	13903.7	13231.6
65°	1027.8	1052.9	1270.9	1628.6	1975.2	3037.2	5879.4	10336.1	13322.0	15015.9	14221.3
67.5°	733.4	754.5	939.4	1276.9	1429.7	1764.2	3985.5	9219.0	13185.4	15058.1	14274.5
70°	525.4	537.5	690.2	994.7	1136.3	1060.0	2216.4	7050.9	11544.8	13904.7	13187.4
72.5°	367.7	371.8	479.2	757.6	915.2	773.6	1054.9	4700.9	8731.7	10913.8	10223.6
75°	249.2	254.2	322.5	555.6	734.4	590.7	558.6	2520.8	5125.8	6041.1	5415.2
77.5°	152.7	154.7	208.0	379.8	549.6	450.1	359.7	1067.9	1983.3	1947.1	1659.7
80°	86.4	86.4	132.6	236.1	374.7	290.4	252.2	454.1	627.9	551.6	486.3
82.5°	48.2	49.2	96.5	146.7	248.2	171.8	138.7	210.0	271.2	240.2	209.0
85°	20.1	22.1	59.2	69.3	118.6	85.4	56.3	88.5	100.4	89.4	65.3
87.5°	2.0	3.0	18.0	13.0	14.0	17.1	8.0	17.1	14.0	14.0	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

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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2311.8	2311.8	2311.8	2311.8	2311.8	2311.8	2311.8	2311.8	2311.8	2311.8	2311.8
2.5°	2326.9	2311.8	2273.6	2229.4	2171.2	2143.0	2104.8	2078.7	2056.6	2058.6	2038.5
5°	2372.1	2333.8	2248.4	2141.9	2009.3	1914.9	1814.5	1745.2	1688.9	1676.8	1649.6
7.5°	2434.4	2374.0	2224.4	2032.5	1808.4	1638.7	1487.0	1389.5	1320.1	1298.1	1275.9
10°	2514.7	2427.3	2193.2	1894.8	1572.4	1356.3	1193.5	1117.2	1070.0	1053.9	1041.8
12.5°	2608.1	2488.6	2152.0	1727.0	1329.2	1121.2	1017.7	979.6	964.5	959.5	956.4
15°	2725.7	2565.0	2089.8	1528.1	1123.2	977.5	933.4	928.3	930.3	928.3	927.3
17.5°	2865.4	2648.3	1988.3	1323.2	984.6	904.3	888.2	892.2	897.2	896.2	894.2
20°	3018.0	2730.7	1858.6	1141.3	890.1	852.0	843.0	847.0	851.0	848.9	848.0
22.5°	3191.8	2819.2	1715.0	999.7	826.9	803.7	793.7	794.7	794.7	790.7	788.6
25°	3399.8	2916.5	1564.3	899.2	778.6	760.6	748.5	744.5	738.4	726.4	724.4
27.5°	3648.0	3020.1	1419.6	828.8	740.5	723.3	709.3	699.3	684.2	664.1	662.0
30°	3927.3	3145.6	1297.0	784.6	710.3	693.2	677.1	662.0	640.0	614.9	612.8
32.5°	4255.8	3280.3	1207.7	755.5	683.2	665.1	646.1	627.9	603.8	578.7	579.7
35°	4647.7	3443.1	1155.4	735.4	662.0	638.0	616.8	596.8	578.7	556.6	554.6
37.5°	5072.6	3615.8	1139.3	725.4	648.0	610.8	586.7	572.7	570.6	557.6	556.6
40°	5537.8	3820.8	1151.4	719.3	632.9	584.8	558.6	555.6	560.6	537.5	538.5
42.5°	6030.1	4063.9	1171.5	712.3	611.8	558.6	533.5	533.5	529.5	497.3	497.3
45°	6562.6	4344.3	1191.6	695.3	586.7	532.5	513.4	506.4	489.2	458.2	457.2
47.5°	7099.0	4629.5	1206.6	664.1	556.6	510.3	493.3	477.2	452.1	423.9	423.0
50°	7608.5	4885.8	1190.5	617.9	522.4	489.2	471.2	449.1	422.0	402.8	399.9
52.5°	8063.6	5107.8	1122.3	563.6	486.3	467.2	451.1	428.0	405.9	385.8	383.8
55°	8459.4	5287.7	1001.6	512.4	454.1	448.1	432.0	402.8	372.7	355.7	353.6
57.5°	8839.2	5424.3	851.0	470.2	425.0	427.0	402.8	376.8	348.6	330.6	328.5
60°	9344.5	5607.1	698.2	431.0	393.8	399.9	373.7	354.6	319.5	296.4	293.4
62.5°	10152.3	5891.4	554.6	382.7	357.6	359.7	348.6	325.5	283.3	256.1	254.2
65°	10793.2	5786.9	437.1	330.6	316.5	319.5	319.5	294.4	249.2	218.0	215.0
67.5°	10720.9	4955.1	348.6	279.3	277.3	279.3	286.3	265.3	221.0	195.9	191.9
70°	9876.0	3941.3	279.3	232.1	241.1	236.1	256.1	242.1	199.0	173.8	170.8
72.5°	8058.6	2839.2	213.0	191.9	184.9	192.9	231.0	218.0	165.7	137.7	134.6
75°	4709.0	1515.1	158.8	151.7	133.7	160.7	205.0	185.8	126.6	101.5	98.5
77.5°	1533.1	528.5	116.5	111.5	99.4	129.6	174.9	156.7	103.5	80.4	77.4
80°	410.9	159.7	79.3	73.4	64.3	96.5	138.7	124.5	74.3	52.3	51.2
82.5°	164.7	67.3	46.2	41.2	35.2	66.3	109.5	100.4	55.2	33.1	33.1
85°	53.2	22.1	17.1	13.0	16.1	41.2	65.3	68.4	39.2	17.1	13.0
87.5°	7.1	3.0	3.0	4.0	3.0	7.1	20.1	19.1	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)