

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: P968166

Luminaire Tested: **NAV-SB5B-722-U-T2U-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P968166
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-17)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB5B-722-U-T2U-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 70 CRI, 2200K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II U
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 18406.9 lumens
Efficiency: N/A
Efficacy: 100.7 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B2 - U0 - G3

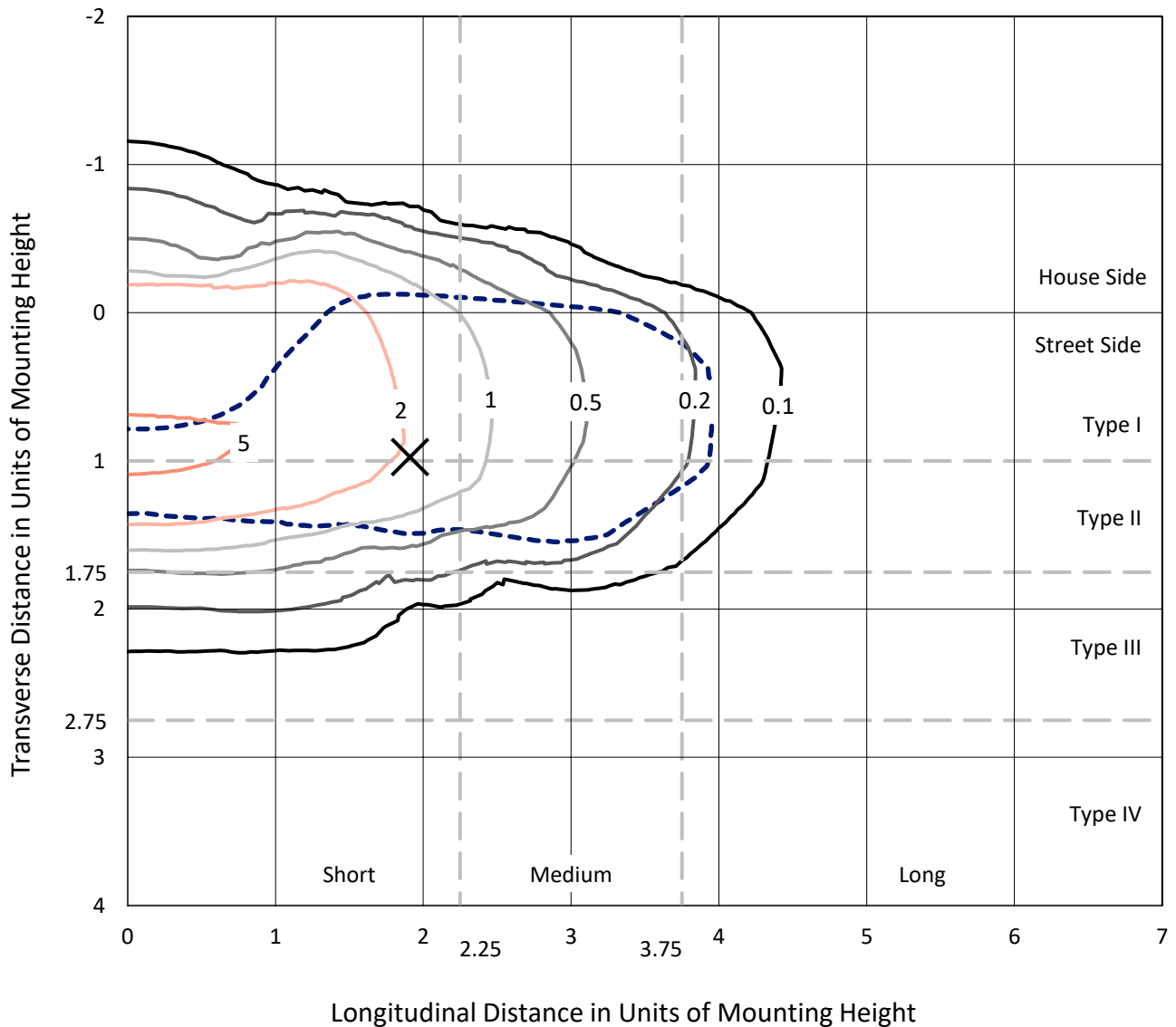
Input Watts (W): 182.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

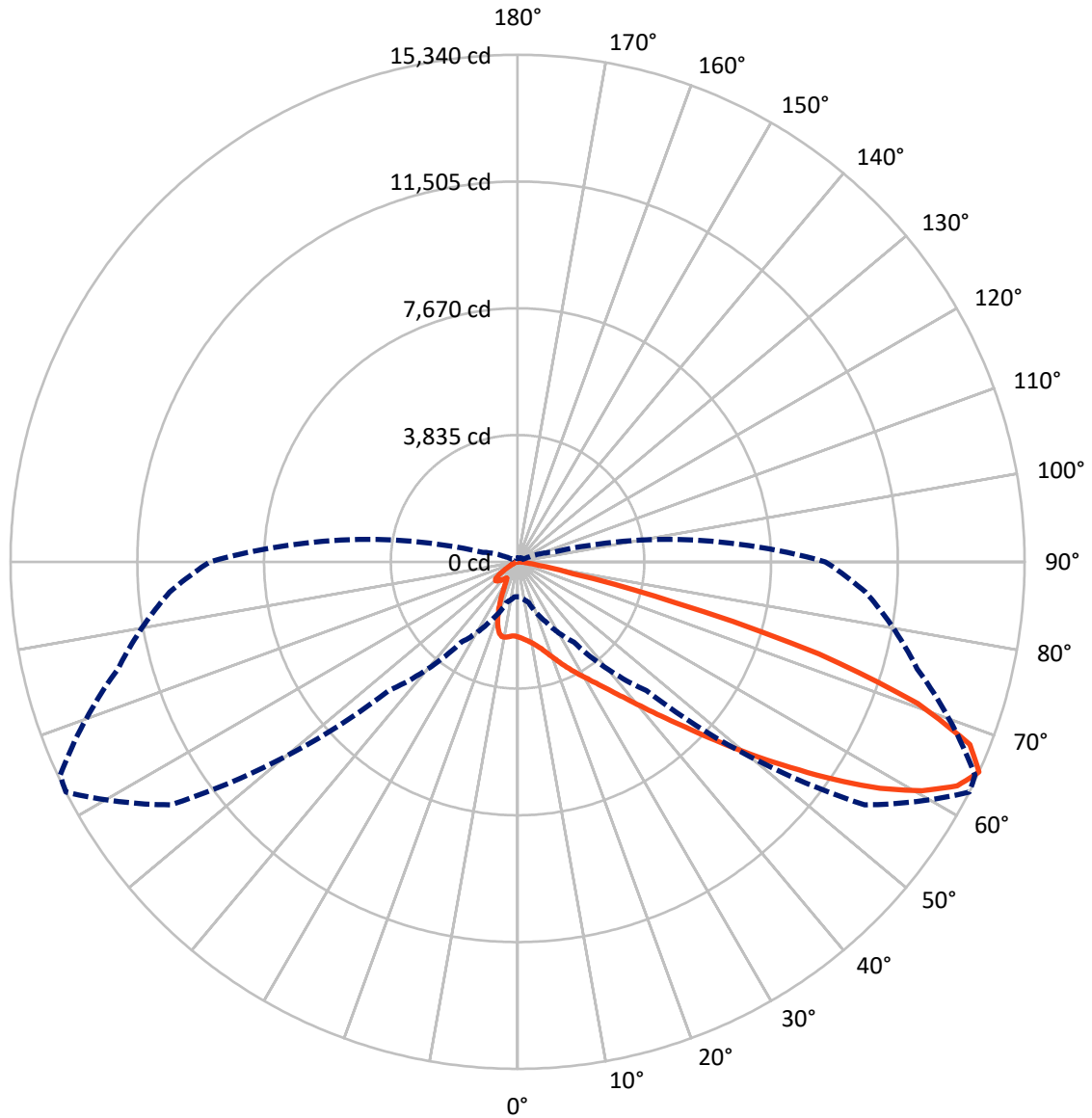
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.2 fc
 Type II - Short - N/A

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CATALOG NUMBER: NAV-SB5B-722-U-T2U-HSS

Luminous Intensity Polar Plot



— Vertical Plane Through 63-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical

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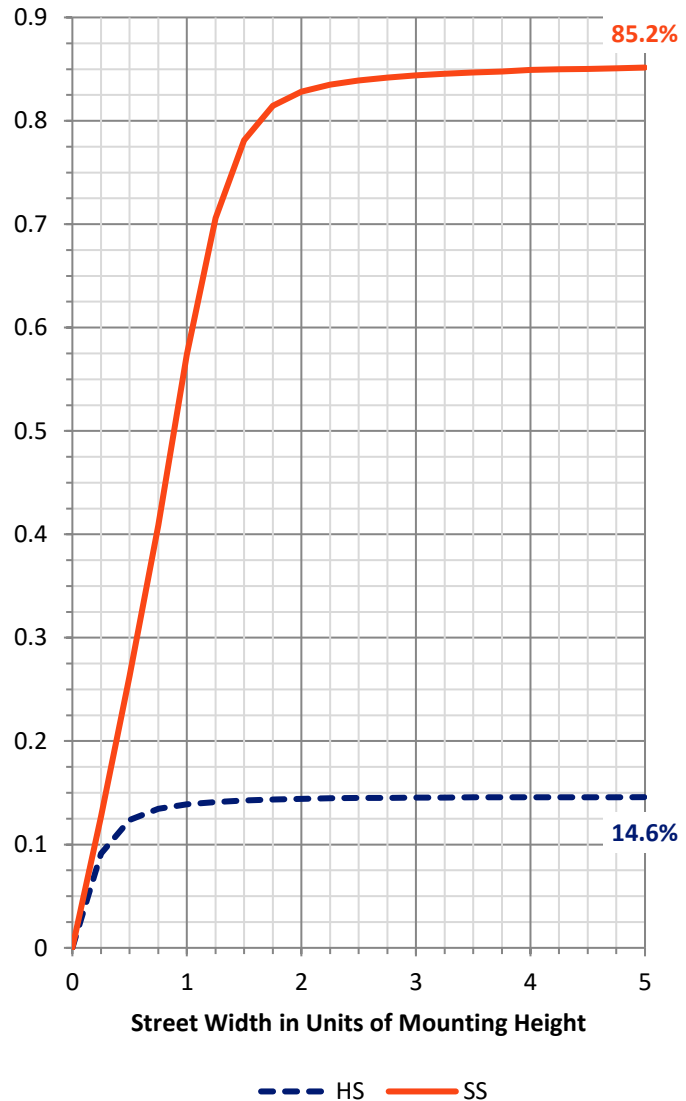
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2705.7	0.0	2705.7
	% Fixture	14.7	0.0	14.7
Street Side	Lumens	15701.3	0.0	15701.3
	% Fixture	85.3	0.0	85.3
Total	Lumens	18406.9	0.0	18406.9
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	214.0	1.2
10°-20°	593.9	3.2
20°-30°	1034.1	5.6
30°-40°	1863.9	10.1
40°-50°	3696.7	20.1
50°-60°	5035.5	27.4
60°-70°	4019.3	21.8
70°-80°	1818.8	9.9
80°-90°	130.7	0.7
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°	18406.9	100.0
0°-180°	18406.9	100.0

Coefficient of Utilization

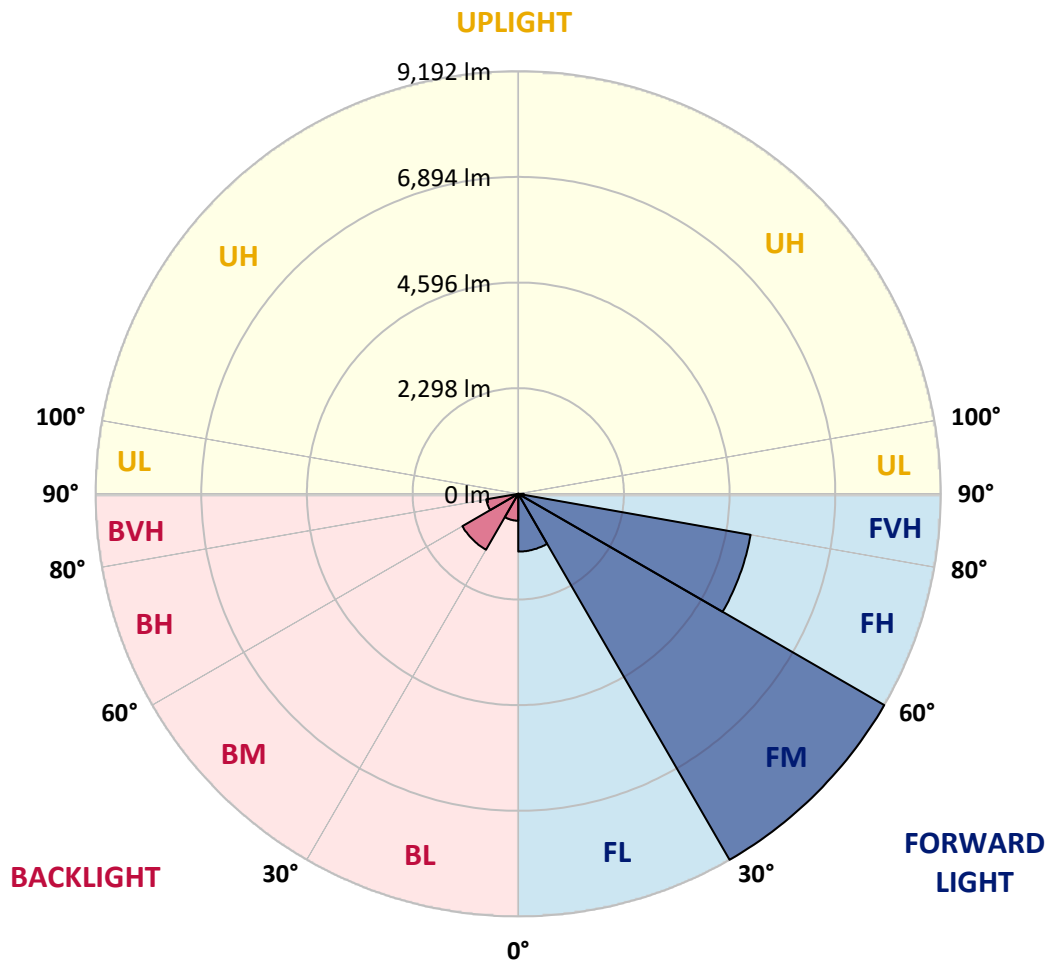


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1256.5	6.8			
FM (30°-60°)	9192.0	49.9			
FH (60°-80°)	5131.8	27.9			G3/7500
FVH (80°-90°)	121.0	0.7			G2/225
BL (0°-30°)	585.6	3.2	B2/1000		
BM (30°-60°)	1404.1	7.6	B2/2500		
BH (60°-80°)	706.3	3.8	B2/1000		G2/1000
BVH (80°-90°)	9.7	0.1			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G3
 Type II Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	63°	65°	75°	85°
0°	2271.8	2271.8	2271.8	2271.8	2271.8	2271.8	2271.8	2271.8	2271.8	2271.8	2271.8
2.5°	2324.9	2318.7	2327.5	2323.7	2321.1	2316.1	2313.5	2311.1	2305.9	2302.1	2287.0
5°	2331.3	2327.5	2336.4	2344.0	2351.6	2359.1	2362.9	2368.0	2362.9	2352.8	2337.6
7.5°	2278.1	2275.6	2294.6	2317.3	2351.6	2380.7	2412.3	2430.1	2431.3	2427.5	2411.1
10°	2274.3	2268.0	2287.0	2314.9	2359.1	2411.1	2466.8	2504.8	2509.8	2526.3	2508.6
12.5°	2333.8	2327.5	2354.1	2384.5	2430.1	2484.5	2552.9	2606.1	2613.6	2636.5	2623.8
15°	2433.9	2424.9	2455.4	2494.6	2552.9	2615.0	2687.1	2735.2	2741.6	2769.4	2746.6
17.5°	2550.4	2541.5	2577.0	2618.8	2682.0	2766.9	2850.4	2903.6	2911.2	2928.9	2887.2
20°	2699.7	2688.4	2716.2	2754.3	2821.3	2922.7	3022.7	3098.7	3097.4	3097.4	3029.0
22.5°	2873.3	2855.5	2879.6	2910.0	2973.3	3096.1	3229.1	3319.1	3319.1	3283.6	3170.8
25°	3059.4	3041.7	3068.2	3096.1	3151.9	3291.2	3446.9	3558.4	3563.4	3502.6	3322.8
27.5°	3292.4	3269.6	3289.8	3322.8	3355.7	3497.6	3682.4	3811.6	3814.1	3720.4	3467.2
30°	3740.7	3676.1	3612.8	3577.4	3592.5	3733.0	3930.7	4073.8	4086.4	3957.2	3624.2
32.5°	4561.2	4548.6	4325.7	4034.5	3882.5	3986.3	4207.9	4380.1	4387.8	4221.9	3828.1
35°	5836.5	5821.3	5462.8	4908.2	4413.1	4325.7	4544.7	4748.7	4743.6	4556.2	4092.7
37.5°	7358.6	7344.6	6872.3	6130.2	5328.7	4838.6	4979.1	5193.2	5224.8	4979.1	4434.7
40°	8659.1	8607.1	8308.2	7592.8	6544.3	5689.6	5597.1	5739.0	5771.9	5480.6	4869.0
42.5°	9644.2	9599.9	9447.9	9000.9	8015.8	6948.3	6325.3	6379.7	6416.4	6066.9	5367.9
45°	10154.6	10144.4	10205.2	10163.4	9515.1	8493.2	7366.2	7139.4	7153.4	6716.5	5933.9
47.5°	10226.7	10221.7	10499.0	10891.5	10804.2	10235.6	8702.1	8086.6	8037.3	7449.7	6549.3
50°	9801.3	9791.1	10323.0	11058.7	11665.3	11699.5	10219.1	9154.2	9045.3	8208.2	7191.4
52.5°	8442.5	8440.0	9313.8	10538.2	11967.9	12981.0	11718.4	10326.8	10144.4	9011.1	7870.2
55°	6496.1	6543.1	7544.7	8992.1	11415.8	13597.6	13064.5	11628.5	11348.7	9819.0	8495.7
57.5°	4601.7	4670.2	5660.5	6949.5	9703.8	13233.0	13975.1	12932.8	12631.5	10624.3	9130.1
60°	2471.9	2532.7	3524.2	5062.7	7219.3	11873.0	14455.0	14064.9	13780.0	11389.2	9702.4
62.5°	1472.7	1493.0	1903.2	3268.3	4882.9	9070.6	14251.1	14927.3	14693.1	12031.2	10200.2
65°	1057.4	1061.2	1267.6	1995.7	2964.4	5511.0	12821.4	15340.1	15267.9	12514.9	10568.7
67.5°	890.2	887.6	973.7	1325.8	2019.8	2760.5	9826.6	14756.3	15062.8	12821.4	10777.6
70°	763.6	767.4	868.7	971.3	1518.3	1562.6	4885.5	12848.0	13501.4	12902.5	10765.0
72.5°	568.6	581.3	675.0	885.2	1146.1	1075.1	1686.7	9526.5	10708.0	12156.6	10206.4
75°	401.4	407.7	474.9	744.6	854.7	782.6	861.1	4924.7	6439.2	9320.0	8353.9
77.5°	308.9	320.4	359.7	520.5	842.1	549.6	526.7	1704.5	2618.8	5630.0	5727.5
80°	167.2	187.4	259.6	376.1	591.3	388.8	260.9	678.8	887.6	2632.7	2208.5
82.5°	86.1	96.2	181.1	271.0	336.8	339.4	129.1	282.4	365.9	812.9	302.7
85°	34.2	41.8	121.6	149.4	173.5	167.2	58.2	114.0	131.7	225.4	92.5
87.5°	7.6	12.7	44.3	34.2	32.9	35.5	13.9	26.5	25.3	26.5	16.5
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°	2271.8	2271.8	2271.8	2271.8	2271.8	2271.8	2271.8	2271.8	2271.8	2271.8	2271.8
2.5°	2285.6	2280.6	2266.7	2251.5	2233.8	2223.6	2217.3	2216.0	2207.1	2200.9	2207.1
5°	2323.7	2318.7	2292.0	2260.3	2226.2	2199.5	2174.2	2151.5	2118.6	2112.2	2109.7
7.5°	2399.6	2385.7	2342.6	2299.6	2235.0	2157.8	2064.0	1956.4	1860.2	1831.1	1817.1
10°	2493.4	2474.4	2419.9	2344.0	2200.9	1990.7	1764.0	1553.8	1386.6	1339.8	1322.0
12.5°	2599.7	2583.3	2511.1	2370.5	2057.8	1676.6	1329.6	1068.8	906.7	866.1	854.7
15°	2726.4	2702.3	2602.3	2330.0	1802.0	1273.9	913.0	758.5	700.3	692.7	685.1
17.5°	2860.6	2821.3	2683.3	2184.4	1457.6	905.4	705.3	661.0	635.7	628.1	624.3
20°	2983.5	2932.7	2731.4	1964.0	1089.1	705.3	631.9	602.8	579.9	571.1	566.0
22.5°	3106.3	3034.1	2731.4	1664.0	816.8	625.6	579.9	553.4	526.7	515.4	509.0
25°	3234.2	3137.9	2683.3	1329.6	657.2	573.6	530.5	501.4	478.7	464.7	459.7
27.5°	3358.3	3225.3	2573.2	1013.0	585.1	528.1	485.0	457.2	435.6	425.5	425.5
30°	3476.0	3311.4	2418.7	768.6	538.2	483.7	443.2	419.1	397.6	387.4	388.8
32.5°	3635.6	3420.3	2254.1	630.6	497.6	442.0	405.2	382.4	363.5	355.9	355.9
35°	3857.2	3581.1	2112.2	619.2	463.5	407.7	371.0	349.5	330.5	324.2	324.2
37.5°	4171.2	3840.8	2037.5	695.2	435.6	377.4	343.2	320.4	302.7	297.6	296.3
40°	4558.7	4192.8	2078.0	771.2	416.7	350.8	317.9	295.1	279.8	273.6	272.2
42.5°	5018.4	4627.2	2302.1	829.4	404.0	328.0	293.8	268.4	258.3	255.8	255.8
45°	5546.5	5104.5	2645.3	891.4	383.7	306.5	269.7	250.7	243.1	241.9	240.6
47.5°	6146.7	5628.8	3042.9	968.7	363.5	286.2	250.7	238.1	231.8	229.2	229.2
50°	6741.8	6156.8	3452.0	1011.8	347.0	267.2	235.5	225.4	220.4	219.0	219.0
52.5°	7364.8	6700.0	3782.5	971.3	333.0	252.0	222.8	215.2	210.2	208.9	208.9
55°	7958.8	7139.4	3839.4	824.4	305.1	236.8	208.9	205.1	198.8	198.8	197.5
57.5°	8470.4	7359.8	3436.7	605.3	277.4	214.0	195.1	191.2	186.1	184.9	183.6
60°	8940.2	7296.5	2652.9	407.7	246.9	191.2	177.3	174.8	169.6	163.4	162.1
62.5°	9204.8	7017.9	1814.7	265.9	216.6	167.2	157.0	155.8	144.3	131.7	129.1
65°	9304.8	6445.5	1132.1	193.7	181.1	143.1	135.5	132.9	116.5	102.6	101.3
67.5°	9217.5	5503.4	571.1	153.2	143.1	119.0	111.4	111.4	100.0	87.3	86.1
70°	8868.0	4125.6	240.6	122.8	110.2	91.2	91.2	96.2	84.9	70.9	69.6
72.5°	8109.5	2775.8	127.9	93.7	82.3	64.6	74.7	78.5	67.1	53.2	53.2
75°	6446.8	1693.1	88.7	69.6	52.0	45.6	57.0	59.6	45.6	35.5	34.2
77.5°	4409.3	972.5	59.6	44.3	32.9	26.5	39.3	36.7	24.1	16.5	17.7
80°	1936.2	405.2	34.2	20.3	12.7	10.1	13.9	10.1	7.6	5.0	5.0
82.5°	226.6	95.0	12.7	7.6	5.0	2.6	1.2	0.0	0.0	0.0	0.0
85°	46.8	11.4	6.4	2.6	1.2	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	8.8	2.6	1.2	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)