

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: P966585

Luminaire Tested: **NAV-SB4C-722-U-T2U-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P966585
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-SB4C-722-U-T2U-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(4) 70 CRI, 2200K, 615mA 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: 19422.7 lumens
Efficiency: N/A
Efficacy: 96.8 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B2 - U0 - G3

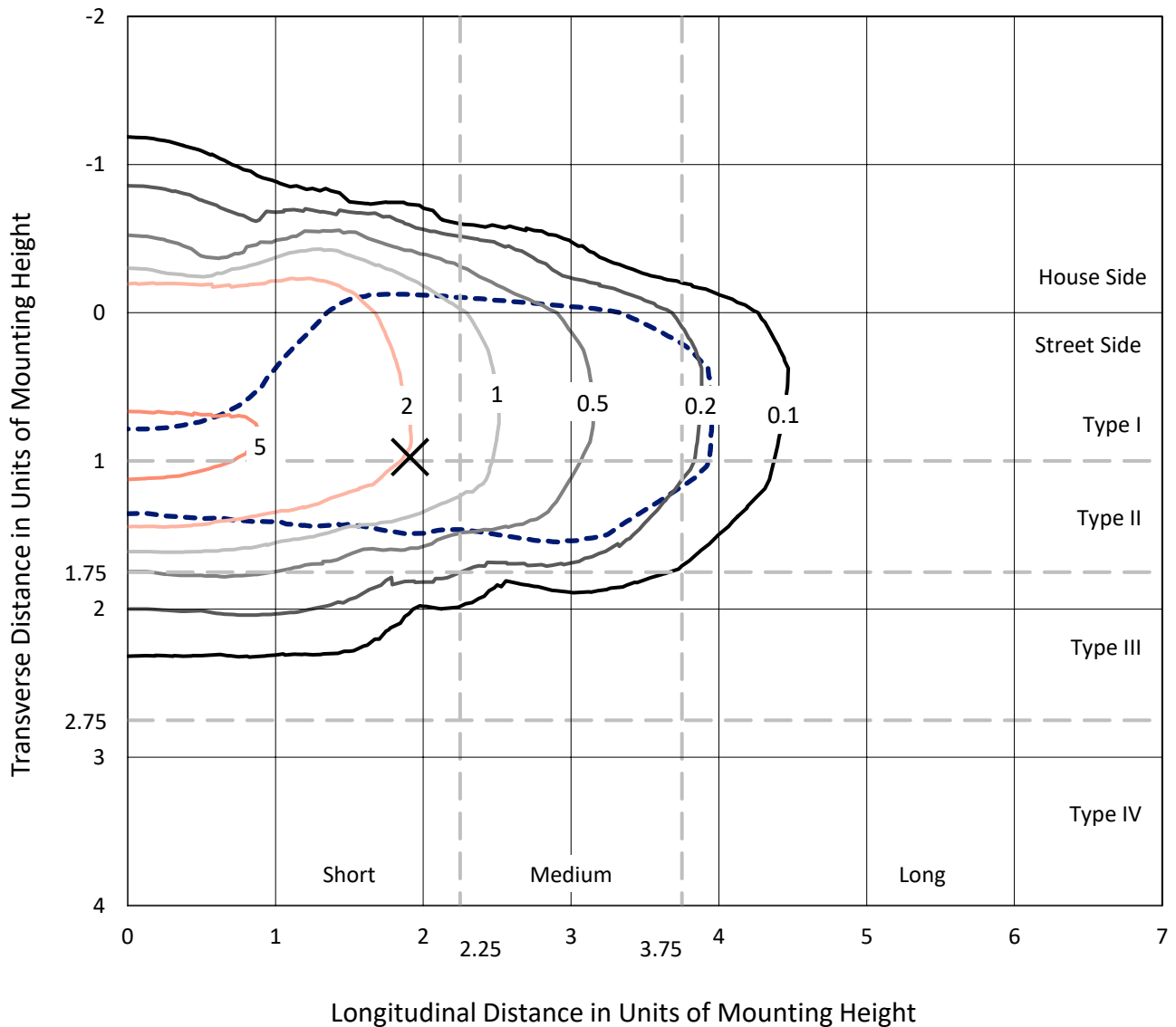
Input Watts (W): 200.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

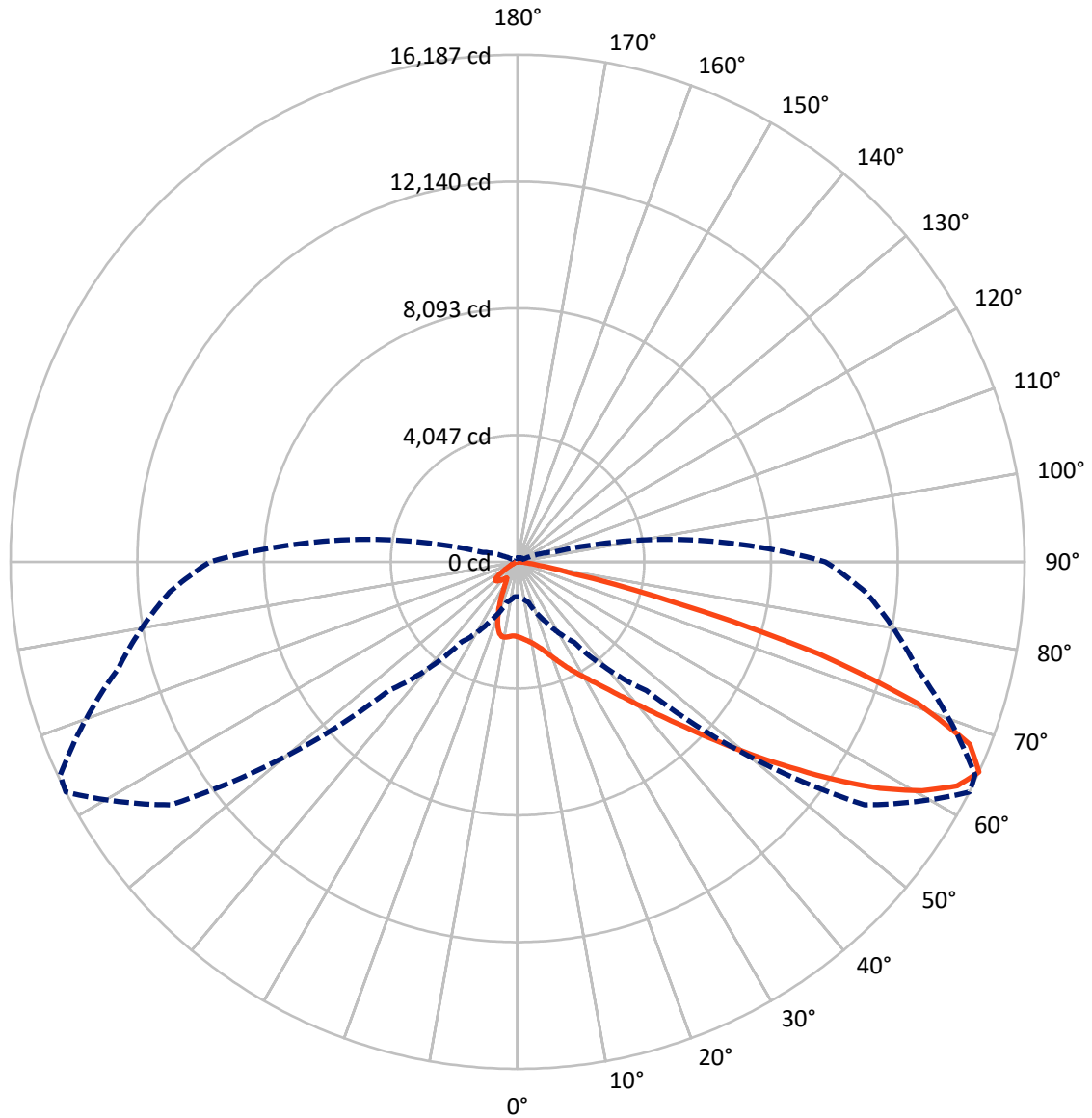
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.6 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



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

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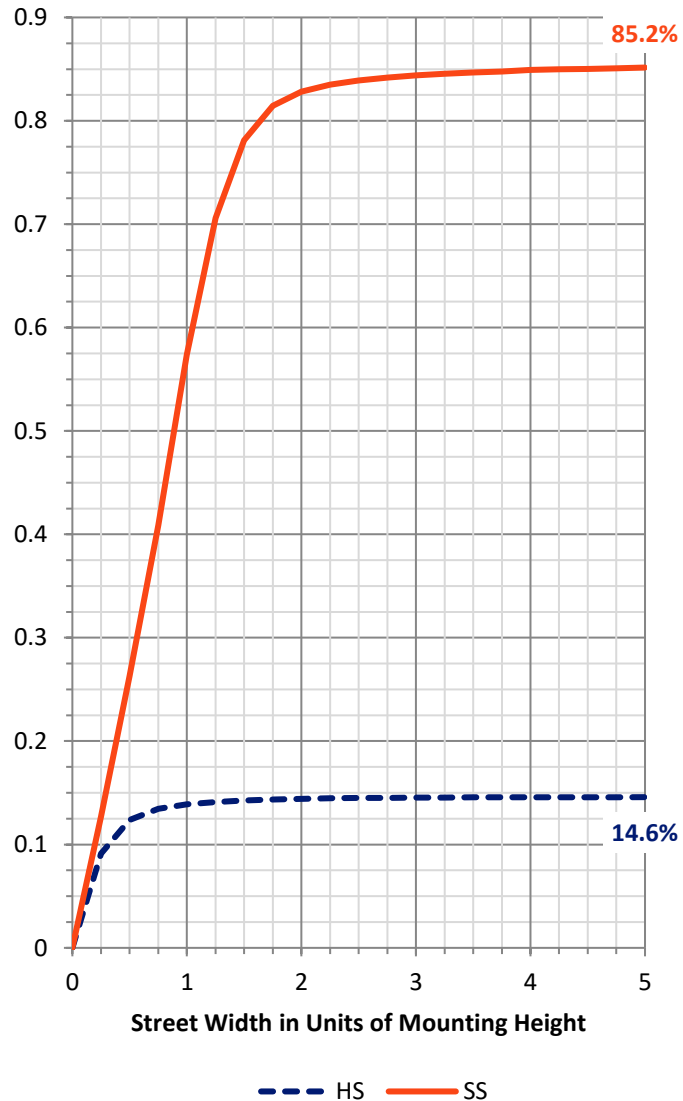
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2855.0	0.0	2855.0
	% Fixture	14.7	0.0	14.7
Street Side	Lumens	16567.7	0.0	16567.7
	% Fixture	85.3	0.0	85.3
Total	Lumens	19422.7	0.0	19422.7
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	225.9	1.2
10°-20°	626.7	3.2
20°-30°	1091.2	5.6
30°-40°	1966.7	10.1
40°-50°	3900.7	20.1
50°-60°	5313.4	27.4
60°-70°	4241.1	21.8
70°-80°	1919.2	9.9
80°-90°	137.9	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°	19422.7	100.0
0°-180°	19422.7	100.0

Coefficient of Utilization



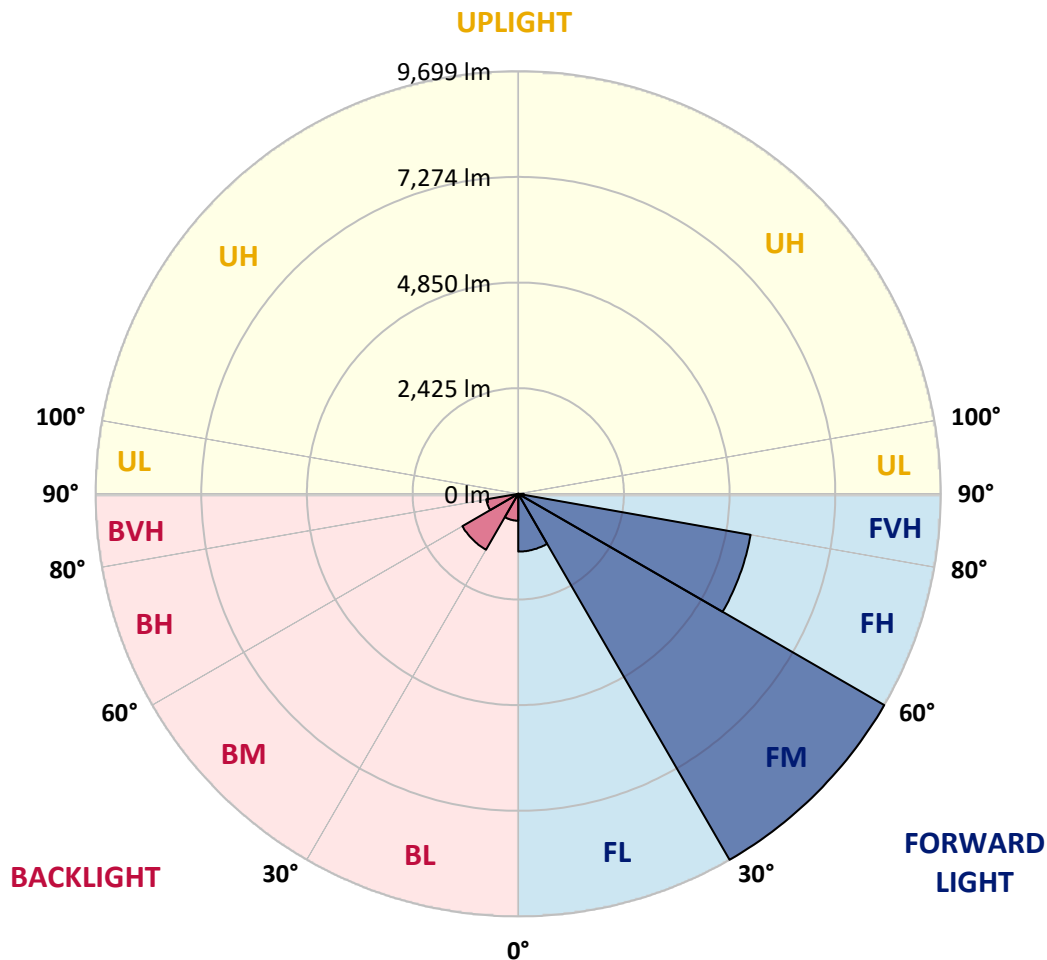
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1325.8	6.8			
FM (30°-60°)	9699.2	49.9			
FH (60°-80°)	5415.0	27.9			G3/7500
FVH (80°-90°)	127.7	0.7			G2/225
BL (0°-30°)	617.9	3.2	B2/1000		
BM (30°-60°)	1481.6	7.6	B2/2500		
BH (60°-80°)	745.3	3.8	B2/1000		G2/1000
BVH (80°-90°)	10.2	0.1			G1/100
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°	2397.2	2397.2	2397.2	2397.2	2397.2	2397.2	2397.2	2397.2	2397.2	2397.2	2397.2
2.5°	2453.2	2446.6	2455.9	2451.9	2449.2	2443.9	2441.2	2438.6	2433.2	2429.2	2413.2
5°	2459.9	2455.9	2465.2	2473.3	2481.3	2489.3	2493.3	2498.6	2493.3	2482.7	2466.7
7.5°	2403.8	2401.2	2421.2	2445.2	2481.3	2512.1	2545.5	2564.1	2565.5	2561.5	2544.2
10°	2399.8	2393.2	2413.2	2442.6	2489.3	2544.2	2602.9	2643.0	2648.3	2665.7	2647.0
12.5°	2462.6	2455.9	2484.0	2516.1	2564.1	2621.6	2693.8	2749.9	2757.9	2782.0	2768.6
15°	2568.1	2558.8	2590.9	2632.3	2693.8	2759.2	2835.4	2886.2	2892.9	2922.3	2898.2
17.5°	2691.1	2681.7	2719.1	2763.3	2830.0	2919.6	3007.8	3063.9	3071.9	3090.6	3046.5
20°	2848.8	2836.8	2866.1	2906.2	2977.0	3083.9	3189.5	3269.6	3268.3	3268.3	3196.2
22.5°	3031.8	3013.1	3038.5	3070.6	3137.4	3267.0	3407.3	3502.1	3502.1	3464.7	3345.8
25°	3228.2	3209.6	3237.6	3267.0	3325.8	3472.8	3637.1	3754.7	3760.0	3695.9	3506.2
27.5°	3474.1	3450.0	3471.5	3506.2	3540.9	3690.6	3885.7	4021.9	4024.7	3925.7	3658.5
30°	3947.1	3879.0	3812.2	3774.8	3790.8	3939.1	4147.6	4298.5	4311.9	4175.6	3824.2
32.5°	4813.0	4799.6	4564.4	4257.1	4096.7	4206.3	4440.2	4621.9	4629.9	4454.9	4039.3
35°	6158.5	6142.5	5764.3	5179.1	4656.7	4564.4	4795.6	5010.7	5005.4	4807.7	4318.5
37.5°	7764.6	7749.9	7251.6	6468.5	5622.7	5105.6	5253.9	5479.8	5513.2	5253.9	4679.3
40°	9136.8	9082.1	8766.7	8011.8	6905.4	6003.5	5905.9	6055.6	6090.3	5783.0	5137.7
42.5°	10176.4	10129.7	9969.4	9497.6	8458.1	7331.7	6674.3	6731.8	6770.5	6401.7	5664.2
45°	10714.9	10704.3	10768.3	10724.3	10040.2	8961.9	7772.7	7533.4	7548.2	7087.2	6261.4
47.5°	10791.1	10785.8	11078.4	11492.6	11400.4	10800.4	9182.4	8532.9	8480.8	7860.8	6910.8
50°	10342.1	10331.5	10892.7	11669.0	12309.0	12345.1	10783.1	9659.3	9544.4	8661.2	7588.3
52.5°	8908.4	8905.7	9827.7	11119.8	12628.4	13697.3	12365.1	10896.7	10704.3	9508.3	8304.4
55°	6854.7	6904.1	7961.1	9488.3	12045.8	14348.1	13785.5	12270.3	11975.0	10360.8	8964.5
57.5°	4855.7	4927.9	5972.8	7333.1	10239.2	13963.3	14746.3	13646.5	13328.5	11210.6	9634.0
60°	2608.2	2672.4	3718.6	5342.1	7617.6	12528.2	15252.6	14841.1	14540.4	12017.7	10237.9
62.5°	1554.0	1575.3	2008.3	3448.7	5152.4	9571.1	15037.6	15751.1	15503.8	12695.1	10763.0
65°	1115.7	1119.7	1337.5	2105.9	3128.0	5815.1	13529.0	16186.7	16110.4	13205.6	11151.9
67.5°	939.3	936.6	1027.6	1399.0	2131.2	2912.9	10368.9	15570.7	15894.1	13529.0	11372.4
70°	805.8	809.7	916.7	1024.9	1602.1	1648.8	5155.0	13557.1	14246.5	13614.5	11358.9
72.5°	599.9	613.4	712.2	934.0	1209.3	1134.5	1779.8	10052.2	11298.9	12827.5	10769.7
75°	423.5	430.3	501.1	785.7	901.9	825.7	908.7	5196.4	6794.5	9834.4	8814.9
77.5°	326.1	338.0	379.5	549.2	888.6	579.9	555.9	1798.6	2763.3	5940.7	6043.6
80°	176.4	197.7	273.9	396.9	624.0	410.2	275.2	716.2	936.6	2778.0	2330.3
82.5°	90.8	101.6	191.1	286.0	355.5	358.1	136.3	298.0	386.1	857.8	319.4
85°	36.1	44.1	128.2	157.6	183.1	176.4	61.5	120.2	139.0	237.8	97.6
87.5°	8.0	13.3	46.7	36.1	34.7	37.4	14.7	28.1	26.8	28.1	17.3
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°	2397.2	2397.2	2397.2	2397.2	2397.2	2397.2	2397.2	2397.2	2397.2	2397.2	2397.2
2.5°	2411.8	2406.5	2391.8	2375.7	2357.1	2346.3	2339.7	2338.3	2329.0	2322.3	2329.0
5°	2451.9	2446.6	2418.5	2385.1	2349.0	2321.0	2294.3	2270.2	2235.4	2228.8	2226.1
7.5°	2532.1	2517.4	2472.0	2426.5	2358.4	2276.8	2178.0	2064.5	1962.9	1932.1	1917.5
10°	2631.0	2610.9	2553.5	2473.3	2322.3	2100.5	1861.3	1639.5	1463.1	1413.7	1395.0
12.5°	2743.2	2725.9	2649.6	2501.3	2171.4	1769.2	1403.0	1127.7	956.7	914.0	901.9
15°	2876.9	2851.4	2745.9	2458.6	1901.4	1344.2	963.4	800.4	738.9	730.9	722.8
17.5°	3018.4	2977.0	2831.4	2304.9	1537.9	955.4	744.3	697.5	670.8	662.8	658.8
20°	3148.1	3094.6	2882.2	2072.4	1149.1	744.3	666.8	636.0	612.0	602.6	597.3
22.5°	3277.6	3201.5	2882.2	1755.7	861.8	660.1	612.0	583.9	555.9	543.9	537.1
25°	3412.6	3311.1	2831.4	1403.0	693.5	605.3	559.9	529.1	505.1	490.4	485.0
27.5°	3543.6	3403.3	2715.1	1069.0	617.4	557.2	511.8	482.4	459.6	449.0	449.0
30°	3667.9	3494.1	2552.1	811.1	567.8	510.4	467.7	442.3	419.5	408.9	410.2
32.5°	3836.2	3609.0	2378.4	665.4	525.1	466.4	427.6	403.5	383.5	375.5	375.5
35°	4070.1	3778.8	2228.8	653.4	489.0	430.3	391.5	368.8	348.7	342.0	342.0
37.5°	4401.5	4052.6	2149.9	733.6	459.6	398.2	362.1	338.0	319.4	314.0	312.6
40°	4810.3	4424.1	2192.7	813.7	439.6	370.1	335.4	311.3	295.3	288.6	287.3
42.5°	5295.4	4882.5	2429.2	875.2	426.2	346.0	310.0	283.3	272.5	269.9	269.9
45°	5852.5	5386.2	2791.3	940.6	404.9	323.4	284.6	264.6	256.6	255.2	253.9
47.5°	6485.9	5939.4	3210.9	1022.2	383.5	302.0	264.6	251.2	244.6	241.9	241.9
50°	7113.9	6496.6	3642.4	1067.6	366.1	282.0	248.6	237.8	232.5	231.1	231.1
52.5°	7771.3	7069.8	3991.2	1024.9	351.4	265.9	235.1	227.1	221.8	220.5	220.5
55°	8397.9	7533.4	4051.3	869.8	322.1	249.9	220.5	216.5	209.8	209.8	208.5
57.5°	8937.8	7765.9	3626.4	638.7	292.6	225.8	205.8	201.7	196.4	195.1	193.7
60°	9433.5	7699.2	2799.3	430.3	260.6	201.7	187.1	184.4	179.1	172.4	171.1
62.5°	9712.8	7405.2	1914.8	280.6	228.5	176.4	165.6	164.3	152.3	139.0	136.3
65°	9818.4	6801.2	1194.5	204.5	191.1	151.0	143.0	140.3	122.9	108.2	106.9
67.5°	9726.1	5807.1	602.6	161.6	151.0	125.6	117.6	117.6	105.6	92.1	90.8
70°	9357.3	4353.3	253.9	129.6	116.2	96.2	96.2	101.6	89.5	74.8	73.5
72.5°	8557.0	2928.9	135.0	98.9	86.8	68.2	78.8	82.8	70.8	56.2	56.2
75°	6802.5	1786.5	93.6	73.5	54.7	48.1	60.2	62.8	48.1	37.4	36.1
77.5°	4652.6	1026.2	62.8	46.7	34.7	28.1	41.4	38.7	25.4	17.3	18.8
80°	2043.0	427.6	36.1	21.4	13.3	10.7	14.7	10.7	8.0	5.3	5.3
82.5°	239.1	100.2	13.3	8.0	5.3	2.7	1.3	0.0	0.0	0.0	0.0
85°	49.4	12.0	6.7	2.7	1.3	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	9.3	2.7	1.3	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)