

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: P966059

Luminaire Tested: **NAV-SB4B-722-U-T2U**

Issue Date: 1/21/2025

**Test Information**

Test Method: LM-79-08  
Report Number: P966059  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-16)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/21/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NAV-SB4B-722-U-T2U  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(4) 70 CRI, 2200K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II U OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 19365.3 lumens  
Efficiency: N/A  
Efficacy: 131.7 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B3 - U0 - G3

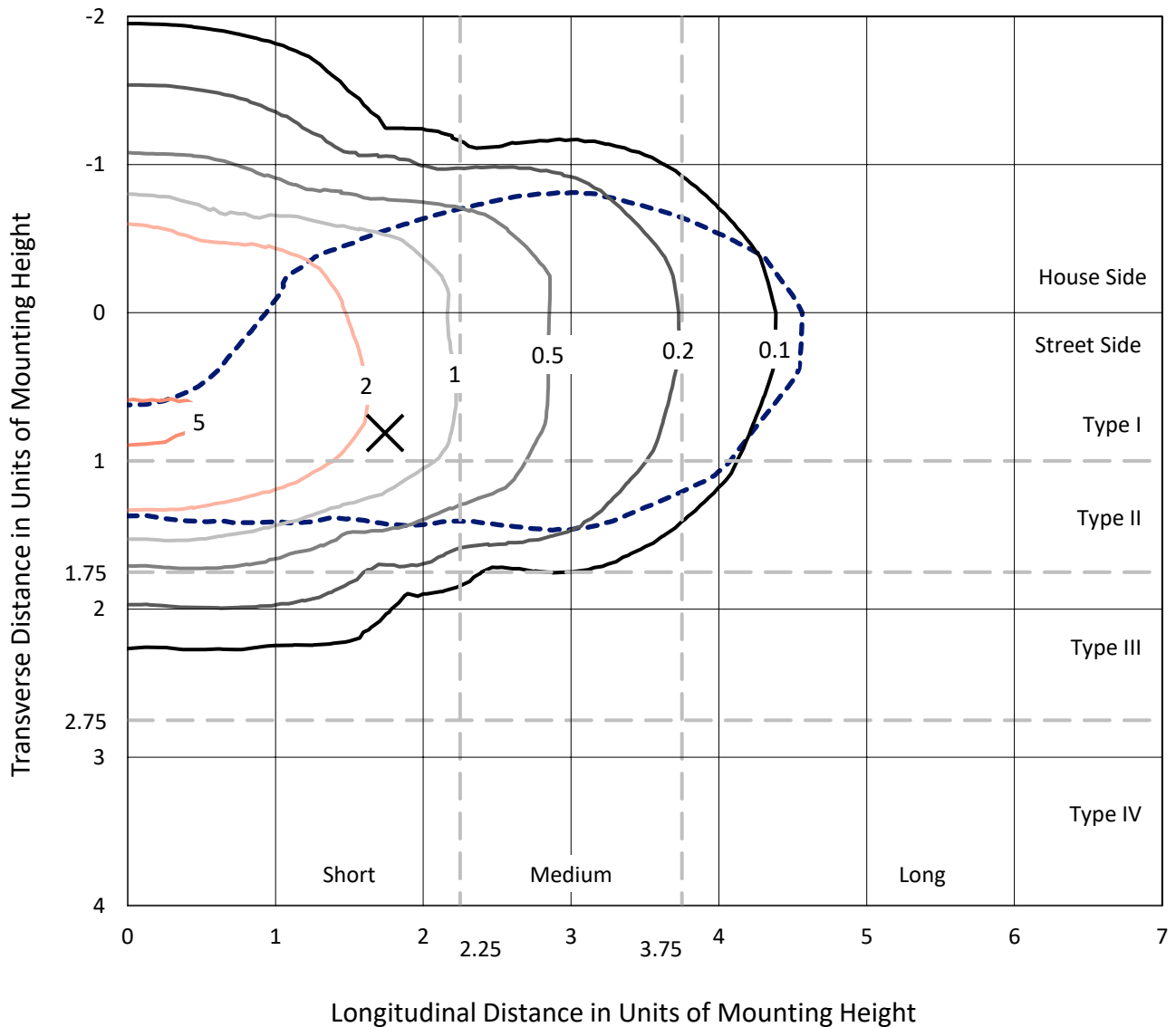
Input Watts (W): 147  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

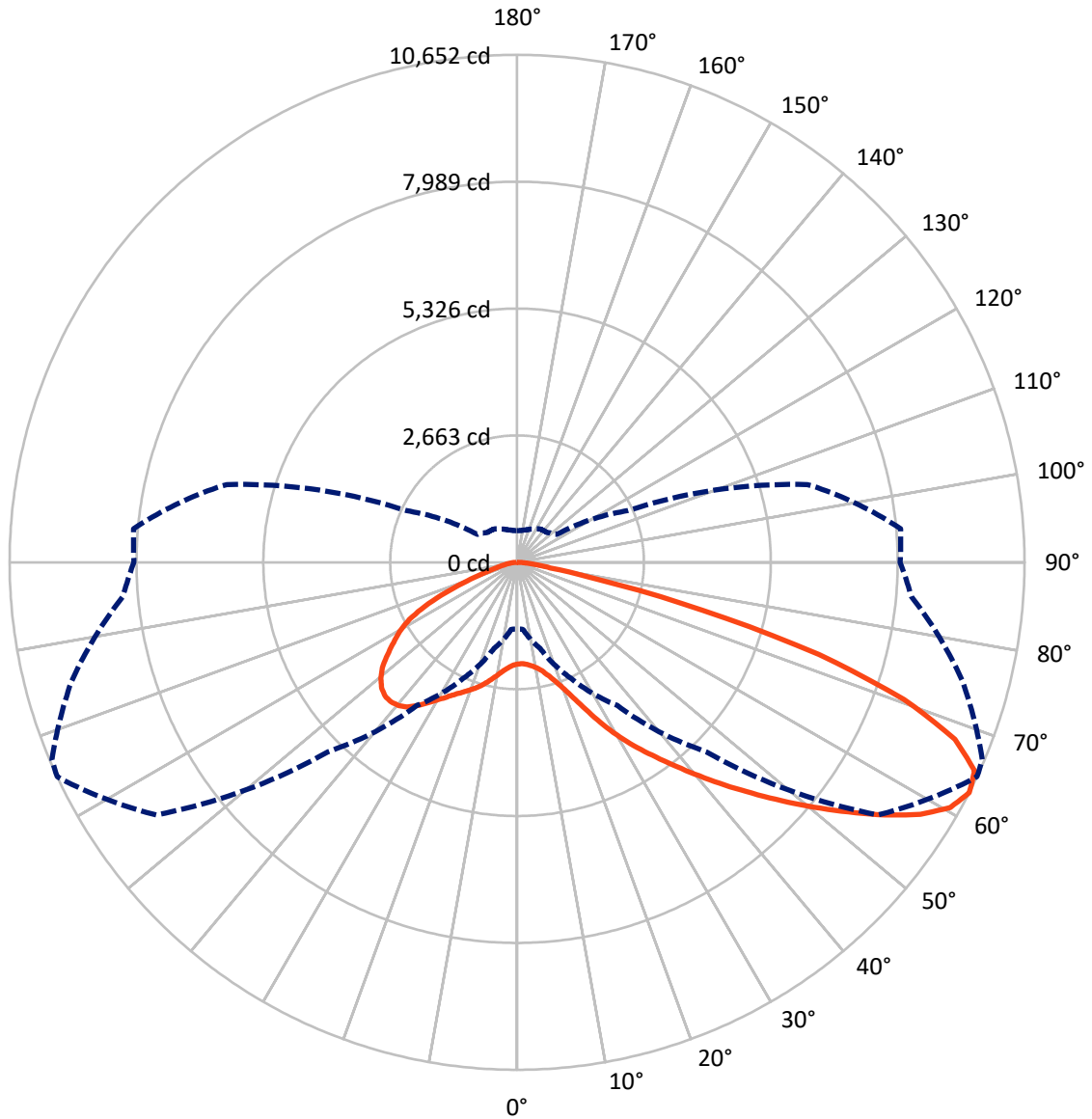
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.4 fc  
 Type II - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 65-Deg Lateral      - - - Horizontal Cone Through 62.5-Deg Vertical

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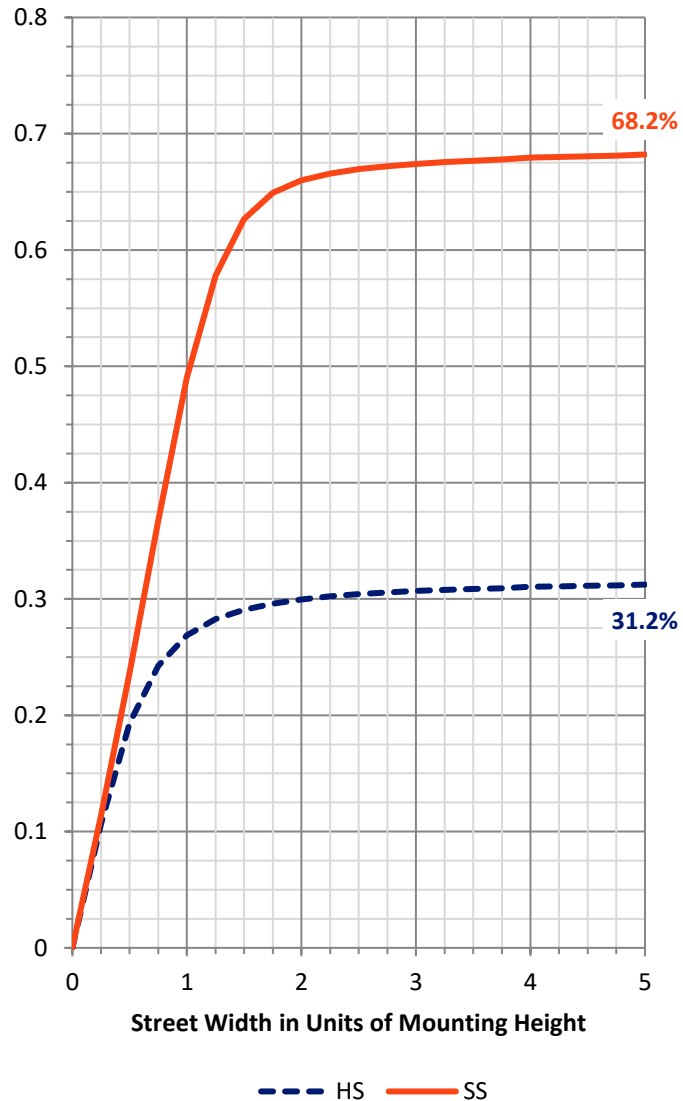
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	6110.9	0.0	6110.9
	% Fixture	31.6	0.0	31.6
<b>Street Side</b>	Lumens	13254.5	0.0	13254.5
	% Fixture	68.4	0.0	68.4
<b>Total</b>	Lumens	19365.3	0.0	19365.3
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	212.8	1.1
10°-20°	721.5	3.7
20°-30°	1462.9	7.6
30°-40°	2531.4	13.1
40°-50°	3830.9	19.8
50°-60°	4491.5	23.2
60°-70°	3765.5	19.4
70°-80°	2078.9	10.7
80°-90°	270.0	1.4
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°	19365.3	100.0
0°-180°	19365.3	100.0

**Coefficient of Utilization**



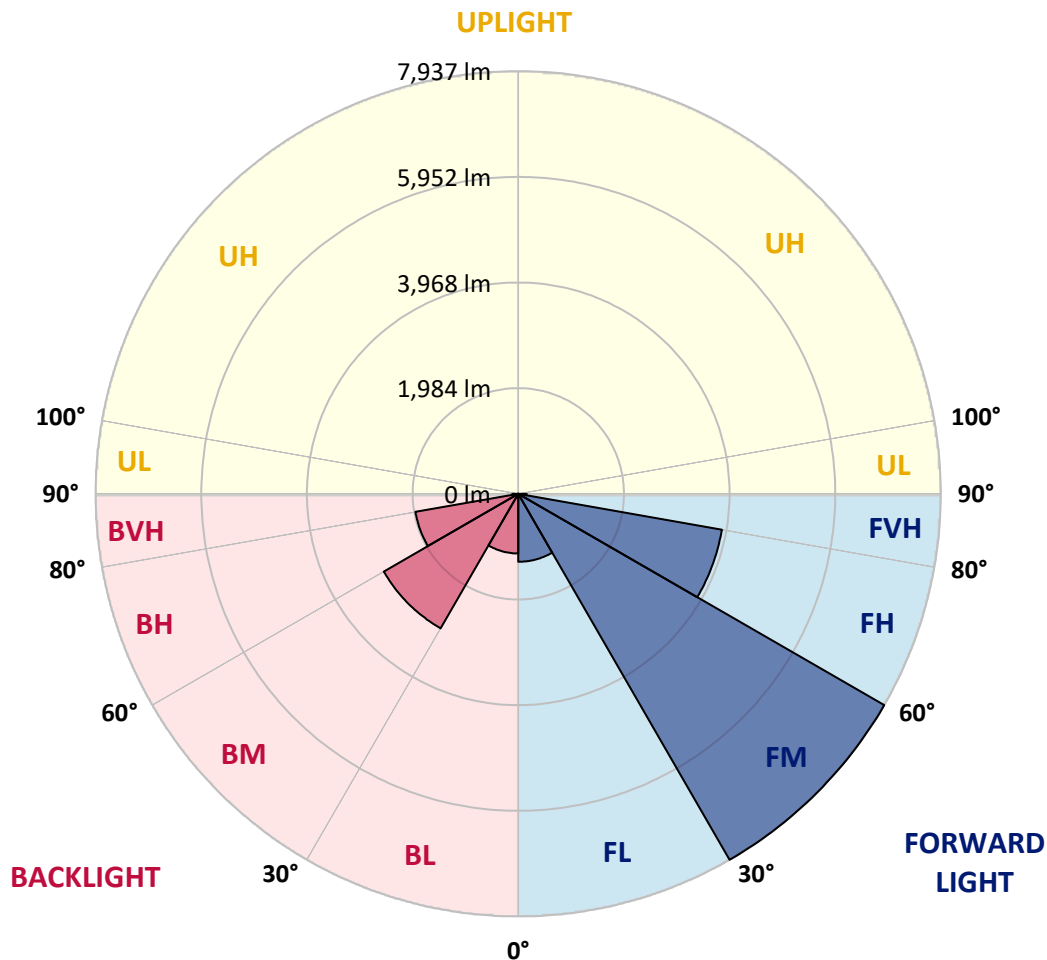
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1276.4	6.6			
FM (30°-60°)	7936.5	41.0			
FH (60°-80°)	3884.1	20.1			G2/5000
FVH (80°-90°)	157.4	0.8			G2/225
BL (0°-30°)	1120.7	5.8	B3/2500		
BM (30°-60°)	2917.2	15.1	B3/5000		
BH (60°-80°)	1960.3	10.1	B3/2500		G3/2500
BVH (80°-90°)	112.7	0.6			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B3-U0-G3**

Type II Short



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	67°	75°	85°
0°	2133.9	2133.9	2133.9	2133.9	2133.9	2133.9	2133.9	2133.9	2133.9	2133.9	2133.9
2.5°	2119.9	2113.9	2118.9	2118.9	2120.9	2119.9	2127.0	2128.9	2132.0	2137.9	2137.9
5°	2098.8	2097.8	2106.9	2114.9	2122.9	2130.0	2139.0	2152.1	2154.0	2161.1	2170.1
7.5°	2091.8	2085.8	2099.8	2109.9	2128.9	2146.0	2170.1	2192.3	2201.3	2204.3	2221.4
10°	2146.0	2136.0	2149.0	2155.1	2171.2	2188.3	2216.4	2251.5	2261.6	2273.7	2292.7
12.5°	2238.5	2227.4	2246.5	2255.5	2270.6	2285.6	2304.8	2338.9	2344.0	2366.1	2384.1
15°	2365.1	2352.0	2364.1	2375.1	2400.2	2414.3	2433.4	2466.6	2466.6	2483.6	2496.7
17.5°	2536.9	2519.8	2528.8	2532.9	2548.9	2570.0	2602.2	2631.3	2646.3	2640.3	2622.3
20°	2793.0	2771.9	2771.9	2751.8	2745.9	2762.9	2805.1	2845.3	2861.4	2830.2	2786.1
22.5°	3177.8	3147.7	3130.7	3062.3	3035.2	3037.2	3079.4	3128.6	3141.7	3086.4	2987.0
25°	3667.1	3619.9	3596.8	3496.4	3435.1	3381.8	3415.0	3478.2	3496.4	3428.0	3267.3
27.5°	4156.5	4159.4	4137.3	4016.8	3915.3	3817.8	3800.8	3867.1	3886.2	3808.8	3609.8
30°	4842.6	4771.3	4729.1	4584.4	4439.8	4303.2	4232.7	4259.9	4264.9	4172.5	3941.4
32.5°	5434.4	5416.3	5325.9	5199.3	5013.5	4799.5	4681.9	4638.6	4630.6	4499.0	4224.7
35°	6108.6	6098.5	6003.0	5852.3	5651.4	5354.0	5142.0	5018.5	5008.5	4823.5	4505.1
37.5°	6793.8	6793.8	6700.3	6535.5	6327.5	5955.9	5633.3	5437.4	5405.2	5164.2	4790.4
40°	7340.3	7307.1	7324.2	7255.0	7016.8	6621.9	6178.9	5894.6	5851.3	5562.0	5093.8
42.5°	7650.8	7639.7	7742.2	7819.5	7722.1	7406.6	6779.7	6389.8	6329.6	6000.0	5443.5
45°	7720.1	7708.0	7890.9	8174.2	8310.8	8181.2	7432.8	6911.3	6838.0	6458.2	5818.2
47.5°	7560.3	7536.2	7804.5	8251.6	8689.6	8917.7	8140.0	7477.0	7370.5	6904.3	6203.0
50°	7080.1	7057.0	7462.9	8056.7	8817.3	9418.0	8907.7	8076.8	7914.0	7382.5	6591.8
52.5°	6036.2	6047.3	6683.2	7499.0	8649.5	9729.5	9568.7	8708.7	8512.8	7871.8	6956.5
55°	4702.0	4726.1	5507.7	6405.9	7978.3	9682.3	10019.8	9359.8	9164.8	8331.9	7333.3
57.5°	3366.7	3473.2	4205.7	5094.9	6689.3	8933.8	10118.3	9978.7	9789.8	8834.3	7702.0
60°	2182.2	2201.3	2954.8	3851.0	5093.8	7603.6	9918.4	10447.8	10300.1	9346.7	8010.5
62.5°	1398.5	1411.6	1870.7	2693.6	3666.1	5625.3	9245.2	10651.8	10606.6	9685.2	8306.8
65°	1027.8	1017.7	1256.9	1780.3	2469.5	3469.2	7938.1	10553.3	10642.8	9897.3	8552.0
67.5°	858.0	844.0	961.4	1232.8	1819.5	1970.3	5873.5	9913.3	10240.9	9873.1	8731.8
70°	781.7	769.6	840.9	915.3	1419.6	1319.2	2960.8	8618.3	9122.6	9598.8	8702.7
72.5°	662.0	641.0	738.4	812.8	1104.1	1011.8	1223.7	6620.0	7234.9	8719.8	8292.8
75°	513.4	499.4	582.7	715.3	829.8	789.7	773.6	4019.7	4690.9	6743.5	7255.0
77.5°	406.9	387.9	464.1	557.6	746.5	595.8	563.6	1731.1	2396.2	4305.1	5428.4
80°	306.5	289.4	352.6	441.1	573.7	449.1	364.7	706.3	903.2	2181.2	2729.8
82.5°	218.0	203.0	246.1	323.5	385.8	402.9	224.1	395.9	445.1	840.9	609.9
85°	139.6	130.6	164.8	203.0	245.2	259.2	136.6	206.9	227.0	346.7	254.2
87.5°	76.4	62.3	88.5	94.4	113.6	103.5	65.3	75.3	81.4	125.6	107.5
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°	2133.9	2133.9	2133.9	2133.9	2133.9	2133.9	2133.9	2133.9	2133.9	2133.9	2133.9
2.5°	2142.0	2145.0	2155.1	2158.1	2165.1	2174.1	2180.2	2186.2	2186.2	2192.3	2192.3
5°	2171.2	2178.2	2199.2	2210.3	2228.5	2246.5	2257.6	2270.6	2278.7	2282.7	2284.7
7.5°	2227.4	2238.5	2268.6	2287.7	2318.9	2344.0	2361.0	2379.1	2383.1	2394.2	2390.2
10°	2303.8	2316.8	2350.9	2387.1	2424.3	2455.5	2471.6	2484.6	2489.6	2491.7	2486.6
12.5°	2391.2	2410.3	2454.5	2498.6	2537.9	2565.0	2569.0	2566.0	2551.9	2539.8	2539.8
15°	2498.6	2515.8	2565.0	2613.2	2651.4	2656.4	2631.3	2615.2	2598.2	2595.1	2595.1
17.5°	2627.3	2636.3	2681.5	2728.8	2731.7	2714.7	2677.5	2662.4	2646.3	2635.3	2636.3
20°	2776.9	2774.0	2806.1	2826.2	2805.1	2752.8	2696.6	2671.5	2655.4	2642.3	2643.4
22.5°	2955.8	2932.7	2928.7	2923.7	2867.4	2757.9	2681.5	2649.4	2624.3	2606.2	2612.2
25°	3216.0	3127.6	3066.3	3032.2	2905.6	2730.8	2633.3	2562.0	2514.7	2483.6	2495.7
27.5°	3541.6	3392.9	3238.2	3154.7	2905.6	2675.5	2516.8	2401.3	2323.9	2291.7	2307.8
30°	3852.1	3696.3	3468.2	3302.4	2898.6	2585.0	2328.9	2168.2	2077.7	2045.6	2064.7
32.5°	4117.2	3947.5	3712.3	3464.2	2881.5	2438.4	2095.8	1918.0	1830.5	1792.4	1811.5
35°	4363.4	4182.5	3957.5	3642.0	2836.3	2223.4	1839.6	1704.0	1606.5	1545.2	1565.3
37.5°	4615.6	4400.5	4189.6	3802.7	2754.9	1972.2	1642.7	1527.1	1412.6	1330.2	1352.3
40°	4889.9	4632.7	4437.7	3898.2	2621.2	1733.1	1489.9	1384.5	1262.9	1175.5	1192.6
42.5°	5210.4	4911.0	4714.1	3947.5	2438.4	1563.3	1390.5	1287.0	1172.5	1101.2	1115.2
45°	5544.9	5217.4	4966.2	3946.5	2234.4	1483.9	1358.3	1255.8	1129.2	1054.9	1067.0
47.5°	5895.6	5537.9	5184.2	3882.2	2057.6	1495.0	1340.3	1188.6	1048.9	976.5	986.6
50°	6247.2	5888.5	5395.2	3761.5	1982.2	1470.9	1272.9	1094.1	929.4	864.1	868.1
52.5°	6595.9	6261.3	5577.0	3589.8	1905.9	1381.5	1186.5	971.5	880.1	834.9	834.9
55°	6946.4	6630.0	5775.0	3339.7	1715.0	1276.9	1041.9	925.4	840.9	799.7	795.7
57.5°	7298.1	7056.0	5962.8	3089.5	1474.9	1148.4	962.5	869.1	801.8	766.6	760.6
60°	7663.8	7543.3	6156.8	2859.3	1237.8	983.6	904.3	823.9	755.5	716.4	713.3
62.5°	8040.6	8079.8	6308.5	2563.0	1019.8	883.1	852.0	769.6	703.3	666.1	665.1
65°	8420.4	8597.2	6408.0	2152.1	826.9	787.7	795.7	710.3	643.0	610.9	609.9
67.5°	8706.7	8969.9	6379.8	1628.6	678.1	697.3	725.4	648.0	584.8	559.6	560.6
70°	8738.8	8925.7	6102.5	1115.2	567.6	608.8	647.0	586.7	521.4	503.4	504.4
72.5°	8310.8	8322.9	5329.9	728.4	480.2	534.5	564.7	524.5	461.1	443.1	442.1
75°	7188.6	6883.2	3913.2	480.2	401.9	459.1	487.3	459.1	397.9	401.9	387.9
77.5°	5446.4	4874.8	2376.2	341.6	335.6	385.8	423.9	403.8	351.7	394.8	347.6
80°	2806.1	2637.3	1060.0	255.2	265.3	308.4	348.6	322.5	278.3	265.3	242.1
82.5°	643.0	747.5	418.0	182.9	191.9	222.0	266.3	242.1	200.0	168.8	166.8
85°	225.1	246.1	184.9	114.5	112.5	138.7	180.8	161.7	135.6	108.5	114.5
87.5°	71.3	93.5	69.3	46.2	48.2	62.3	83.4	76.4	63.3	41.2	43.2
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)