

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: P965597

Luminaire Tested: **NAV-SB4A-730-U-T3R-HSS**

Issue Date: 1/21/2025

**Test Information**

Test Method: LM-79-08  
Report Number: P965597  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-6)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/21/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NAV-SB4A-730-U-T3R-HSS  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(4) 70 CRI, 3000K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III  
ROADWAY OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 15341.2 lumens  
Efficiency: N/A  
Efficacy: 134.6 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type III - Medium  
BUG Rating: B2 - U0 - G3

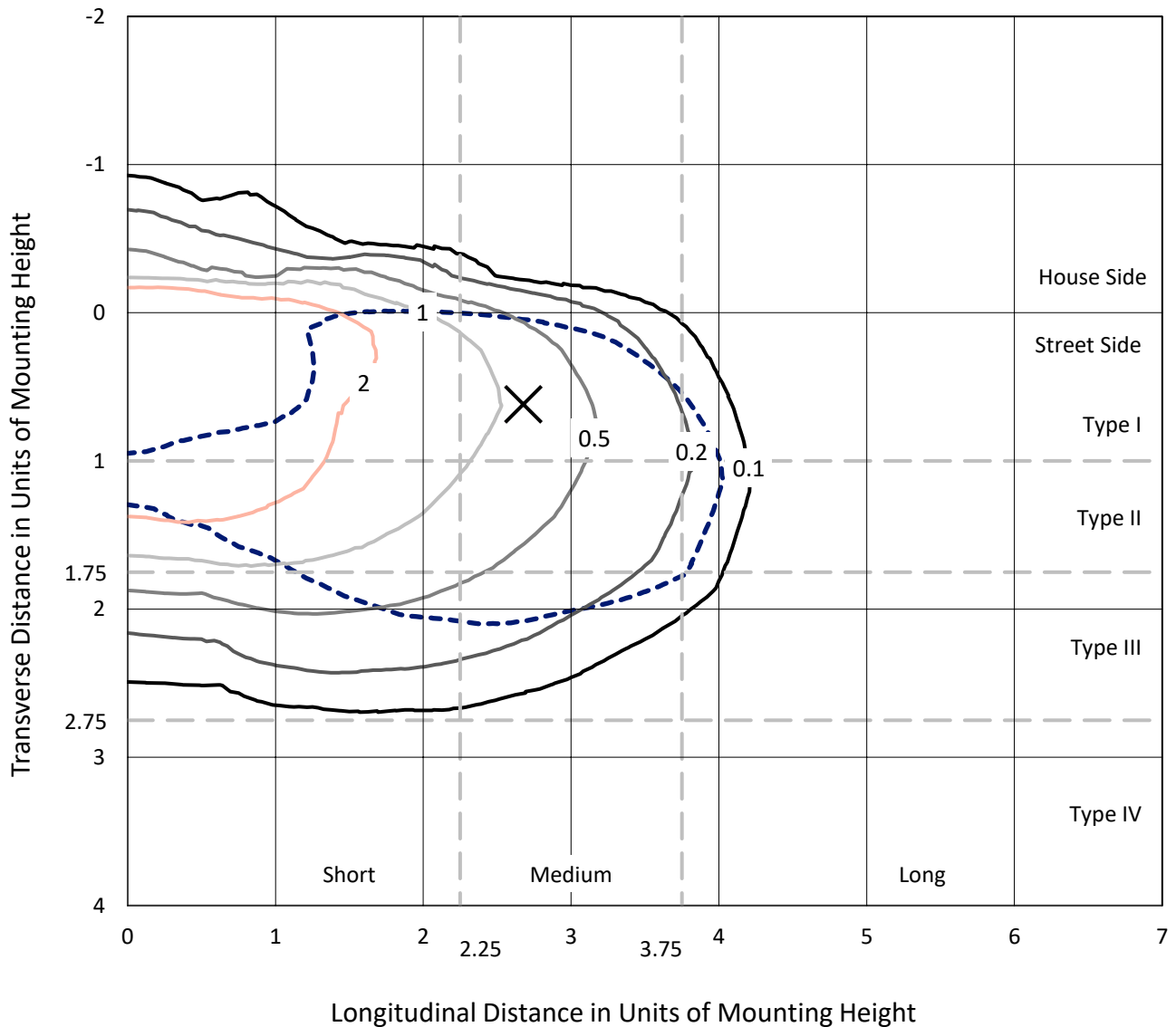
Input Watts (W): 114  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

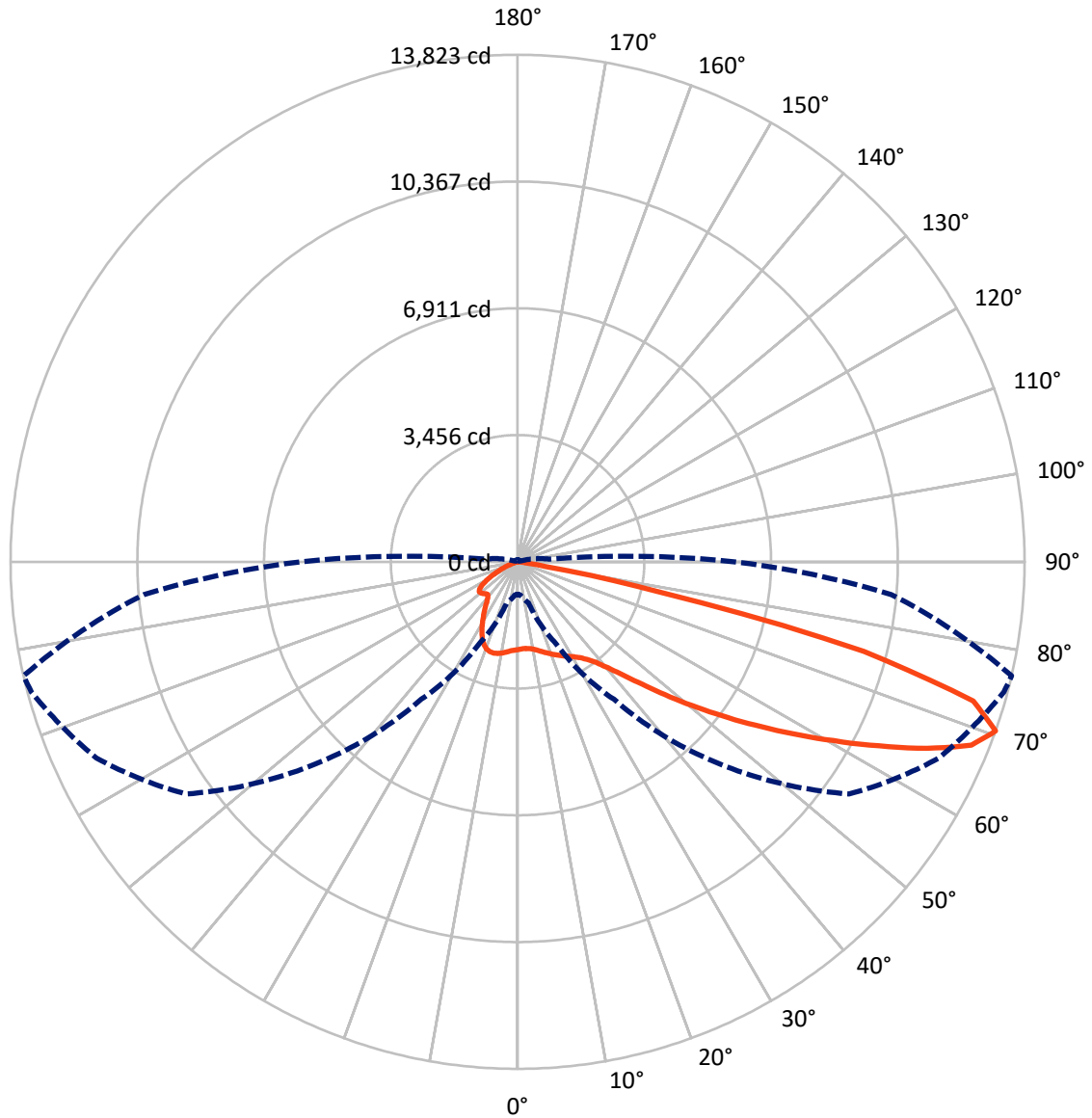
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.5 fc  
 Type III - Medium - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 77-Deg Lateral    - - - Horizontal Cone Through 70-Deg Vertical

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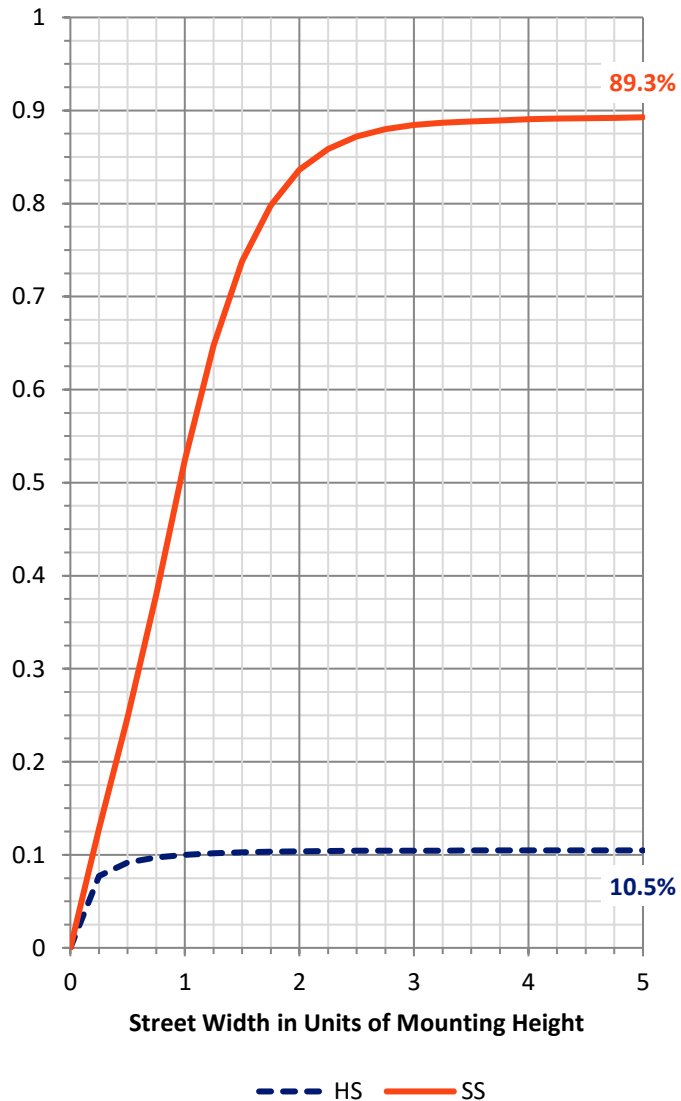
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1617.2	0.0	1617.2
	% Fixture	10.5	0.0	10.5
<b>Street Side</b>	Lumens	13724.0	0.0	13724.0
	% Fixture	89.5	0.0	89.5
<b>Total</b>	Lumens	15341.2	0.0	15341.2
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	206.2	1.3
10°-20°	489.6	3.2
20°-30°	757.2	4.9
30°-40°	1374.1	9.0
40°-50°	2593.7	16.9
50°-60°	3747.7	24.4
60°-70°	3989.3	26.0
70°-80°	2114.0	13.8
80°-90°	69.4	0.5
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°	15341.2	100.0
0°-180°	15341.2	100.0

**Coefficient of Utilization**

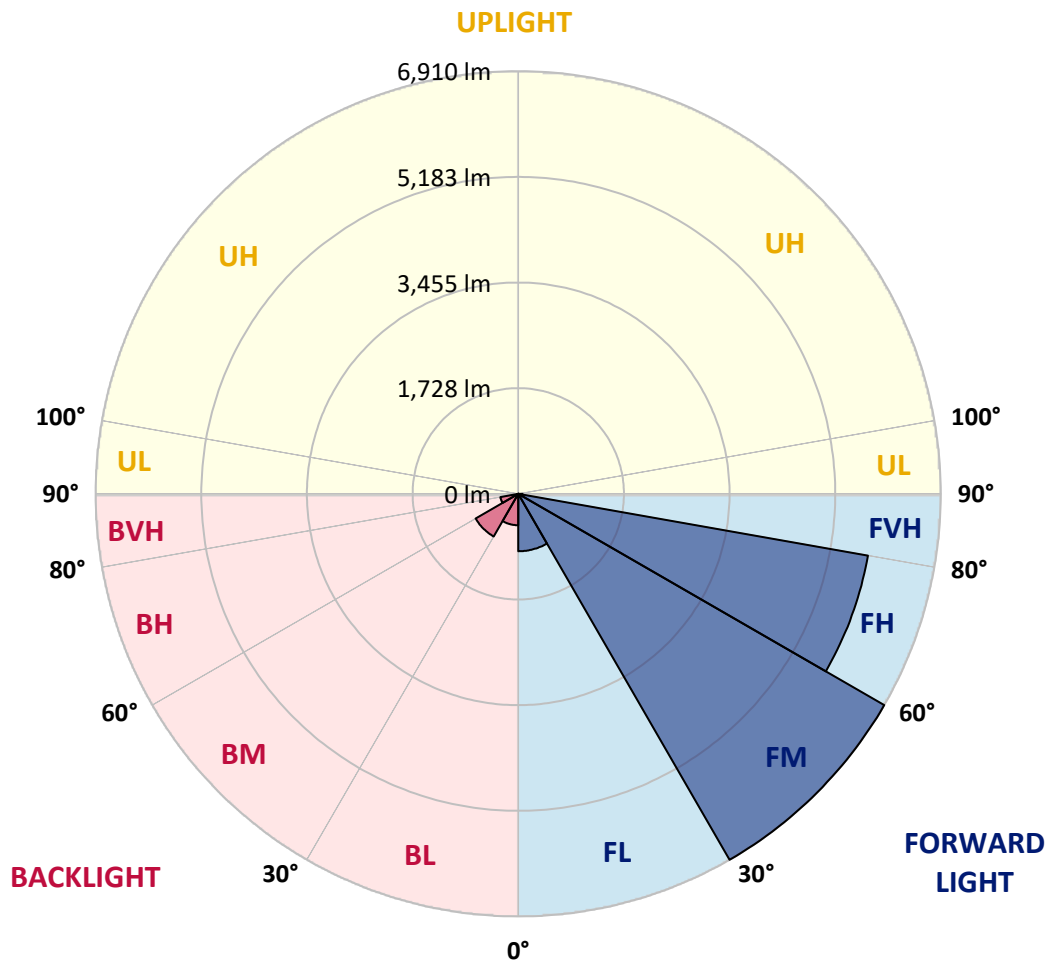


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	939.2	6.1			
FM (30°-60°)	6910.4	45.0			
FH (60°-80°)	5806.9	37.9			G3/7500
FVH (80°-90°)	67.5	0.4			G1/100
BL (0°-30°)	513.8	3.3	B2/1000		
BM (30°-60°)	805.0	5.2	B1/1000		
BH (60°-80°)	296.5	1.9	B1/500		G1/500
BVH (80°-90°)	1.9	0.0			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 III Medium



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77°	85°
0°	2393.0	2393.0	2393.0	2393.0	2393.0	2393.0	2393.0	2393.0	2393.0	2393.0	2393.0
2.5°	2246.7	2267.0	2264.1	2277.7	2282.5	2301.8	2321.2	2347.5	2376.5	2375.5	2394.9
5°	2119.7	2140.1	2144.9	2163.4	2186.6	2216.7	2256.3	2308.7	2362.9	2371.6	2410.4
7.5°	1969.5	1990.9	2003.5	2040.3	2082.9	2144.9	2209.8	2286.4	2376.5	2389.1	2463.7
10°	1819.4	1838.7	1855.2	1907.5	1975.4	2067.4	2173.0	2283.5	2404.5	2423.0	2528.6
12.5°	1726.4	1744.9	1763.2	1808.7	1893.1	2005.4	2148.8	2297.0	2451.1	2477.2	2616.7
15°	1693.5	1709.9	1724.5	1765.2	1843.7	1971.5	2144.0	2325.1	2510.1	2545.1	2723.3
17.5°	1698.3	1707.0	1716.7	1747.7	1824.3	1956.0	2152.7	2373.6	2579.9	2610.9	2829.9
20°	1726.4	1731.2	1732.2	1753.6	1821.3	1954.1	2170.1	2420.0	2645.8	2687.4	2935.5
22.5°	1762.3	1764.2	1762.3	1776.8	1839.8	1968.6	2193.4	2476.3	2719.4	2758.2	3042.0
25°	1929.9	1893.1	1846.5	1818.5	1870.7	1996.7	2228.2	2551.8	2799.9	2837.6	3145.7
27.5°	2450.1	2344.5	2177.9	1990.9	1934.7	2037.4	2276.7	2628.4	2881.2	2915.1	3257.1
30°	3294.9	3156.4	2873.5	2452.0	2140.1	2122.7	2339.7	2704.9	2967.5	3004.3	3376.2
32.5°	4141.6	4107.7	3781.2	3198.0	2602.2	2312.5	2444.3	2808.6	3081.8	3110.9	3537.1
35°	4998.1	4929.2	4661.9	4085.4	3314.2	2699.1	2618.7	2944.2	3231.9	3264.8	3771.6
37.5°	5653.9	5612.3	5446.6	4971.9	4159.0	3295.9	2917.0	3154.4	3449.9	3486.7	4071.9
40°	6233.3	6214.0	6157.7	5844.8	5103.7	4076.7	3381.2	3480.0	3752.2	3795.8	4440.0
42.5°	6688.6	6734.1	6766.1	6678.9	6077.3	4968.1	4005.1	3937.2	4173.6	4218.2	4908.9
45°	7154.6	7170.1	7298.9	7424.9	7044.2	5900.0	4708.3	4473.0	4697.8	4752.9	5470.8
47.5°	7454.0	7516.0	7742.6	7964.6	7857.0	6824.2	5464.1	5105.6	5305.2	5408.8	6100.6
50°	7476.2	7593.5	7905.4	8292.0	8449.0	7703.9	6285.6	5826.4	6038.6	6152.9	6772.9
52.5°	7105.2	7287.3	7770.7	8336.5	8768.7	8449.0	7135.2	6547.2	6819.4	6968.6	7470.4
55°	5447.6	5685.9	7264.1	8094.3	8781.3	9013.7	7962.6	7298.0	7689.4	7858.0	8224.2
57.5°	4746.2	4866.3	5711.1	7673.9	8547.8	9241.4	8710.6	8012.9	8635.9	8845.1	8936.3
60°	3948.8	4106.8	4789.7	6986.1	8231.0	9263.7	9371.3	8935.2	9661.9	9897.3	9589.2
62.5°	2683.6	2855.0	3534.2	5804.1	7797.9	9253.1	9912.8	9884.7	10802.2	11055.0	10142.4
65°	1662.4	1770.0	2217.6	4739.4	7192.4	9264.7	10479.6	11037.6	12005.4	12262.2	10570.6
67.5°	1313.7	1363.1	1596.5	3638.9	6149.0	9003.1	11045.3	12121.6	13137.9	13341.4	10701.4
70°	882.6	912.7	1161.6	2439.5	4574.7	7795.9	11034.6	12666.1	13721.2	13822.9	10224.8
72.5°	465.0	488.3	679.2	1129.7	2763.0	5541.6	9301.5	12015.2	13140.9	12987.8	8739.6
75°	232.5	271.2	457.3	573.5	1180.0	3090.5	5776.0	9472.9	10343.0	9750.0	5607.5
77.5°	176.3	213.1	377.8	377.8	410.8	1040.5	2446.3	5166.6	4765.5	3968.2	1646.0
80°	112.3	145.3	330.4	285.8	171.5	264.4	637.4	1447.4	1012.4	770.2	299.4
82.5°	65.9	94.9	275.1	188.9	95.9	97.9	180.2	308.1	262.5	204.4	92.0
85°	26.1	62.0	188.9	74.6	37.8	24.2	54.2	65.9	54.2	40.7	23.3
87.5°	0.0	14.6	32.9	0.0	2.9	1.9	3.9	4.8	4.8	3.9	7.8
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°	2393.0	2393.0	2393.0	2393.0	2393.0	2393.0	2393.0	2393.0	2393.0	2393.0	2393.0
2.5°	2403.6	2405.6	2411.3	2412.3	2398.8	2381.3	2374.5	2371.6	2360.0	2359.0	2361.0
5°	2432.6	2441.3	2432.6	2407.5	2347.5	2263.1	2199.1	2146.9	2099.4	2084.8	2076.1
7.5°	2490.8	2499.6	2473.3	2374.5	2223.4	2055.8	1904.7	1798.1	1702.2	1666.3	1651.8
10°	2574.1	2585.8	2503.4	2303.8	2036.5	1767.1	1511.4	1331.2	1190.6	1133.5	1109.3
12.5°	2678.7	2683.6	2519.9	2196.3	1793.2	1408.7	1046.3	853.5	728.6	682.0	667.5
15°	2794.0	2787.3	2521.8	2050.0	1462.0	995.9	683.0	561.0	510.6	495.1	495.1
17.5°	2915.1	2887.0	2483.1	1838.7	1098.6	681.1	506.7	477.6	468.9	465.0	464.0
20°	3034.3	2971.4	2412.3	1562.7	788.6	508.6	460.2	451.5	446.6	444.6	442.7
22.5°	3142.8	3035.2	2291.2	1242.0	572.6	449.6	435.0	427.2	418.5	414.6	413.7
25°	3248.4	3072.0	2120.7	942.7	458.3	420.5	408.9	394.3	382.6	377.8	375.9
27.5°	3351.1	3095.3	1907.5	697.5	408.9	393.3	372.0	351.7	343.0	341.0	339.1
30°	3460.6	3103.1	1665.4	520.3	378.8	359.5	328.4	305.1	300.3	301.2	301.2
32.5°	3594.3	3114.7	1421.3	426.3	353.6	318.8	281.9	257.7	253.8	257.7	256.8
35°	3754.2	3137.9	1185.8	392.4	331.3	277.1	237.4	217.0	213.1	216.1	215.0
37.5°	3971.2	3175.8	965.9	385.6	312.9	242.2	199.6	183.1	183.1	184.1	183.1
40°	4259.8	3276.5	769.3	380.8	303.2	216.1	168.6	161.7	164.7	166.7	166.7
42.5°	4611.5	3490.6	636.5	374.9	292.5	204.4	153.0	150.2	155.0	156.9	156.9
45°	5005.8	3761.9	590.0	365.2	282.9	212.2	146.3	142.4	148.2	149.2	150.2
47.5°	5413.6	4027.3	584.1	354.5	273.2	223.8	144.3	135.6	142.4	143.4	144.3
50°	5826.4	4200.8	590.0	338.1	257.7	223.8	145.3	128.8	134.7	137.6	138.6
52.5°	6242.0	4280.2	586.1	302.3	230.6	210.2	145.3	123.0	128.8	130.8	130.8
55°	6645.1	4264.7	527.1	249.0	195.7	186.0	141.4	118.2	122.1	123.0	123.0
57.5°	6963.7	4048.6	417.6	193.7	158.9	155.0	128.8	112.3	115.3	114.3	114.3
60°	7130.4	3573.9	298.4	149.2	124.9	122.1	113.4	104.7	106.6	101.7	100.8
62.5°	7132.4	2946.2	199.6	118.2	99.8	96.9	96.9	94.0	92.0	82.3	79.4
65°	6980.2	2249.6	132.7	94.0	80.4	75.5	81.4	80.4	73.6	60.1	58.1
67.5°	6635.3	1474.6	100.8	73.6	62.0	59.1	64.9	67.9	62.9	50.3	49.4
70°	5926.1	858.3	83.3	57.2	46.5	43.6	52.3	58.1	52.3	40.7	38.7
72.5°	4922.5	463.1	67.9	42.6	32.0	29.1	41.6	47.5	41.6	30.0	29.1
75°	3194.1	248.0	52.3	28.1	16.5	18.4	31.0	34.8	29.1	19.4	17.4
77.5°	1072.5	109.5	32.9	13.5	7.8	7.8	18.4	21.3	13.5	6.8	5.8
80°	239.3	45.5	13.5	5.8	2.9	2.9	3.9	3.9	1.9	0.0	0.0
82.5°	78.5	18.4	5.8	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	30.0	6.8	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	11.6	0.9	0.0	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)