

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: P962119

Luminaire Tested: **NAV-SB2B-835-U-T2R-HSS**

Issue Date: 1/21/2025

**Test Information**

Test Method: LM-79-08  
Report Number: P962119  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-4)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/21/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NAV-SB2B-835-U-T2R-HSS  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(2) 80 CRI, 3500K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II  
ROADWAY OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: -

**Summary**

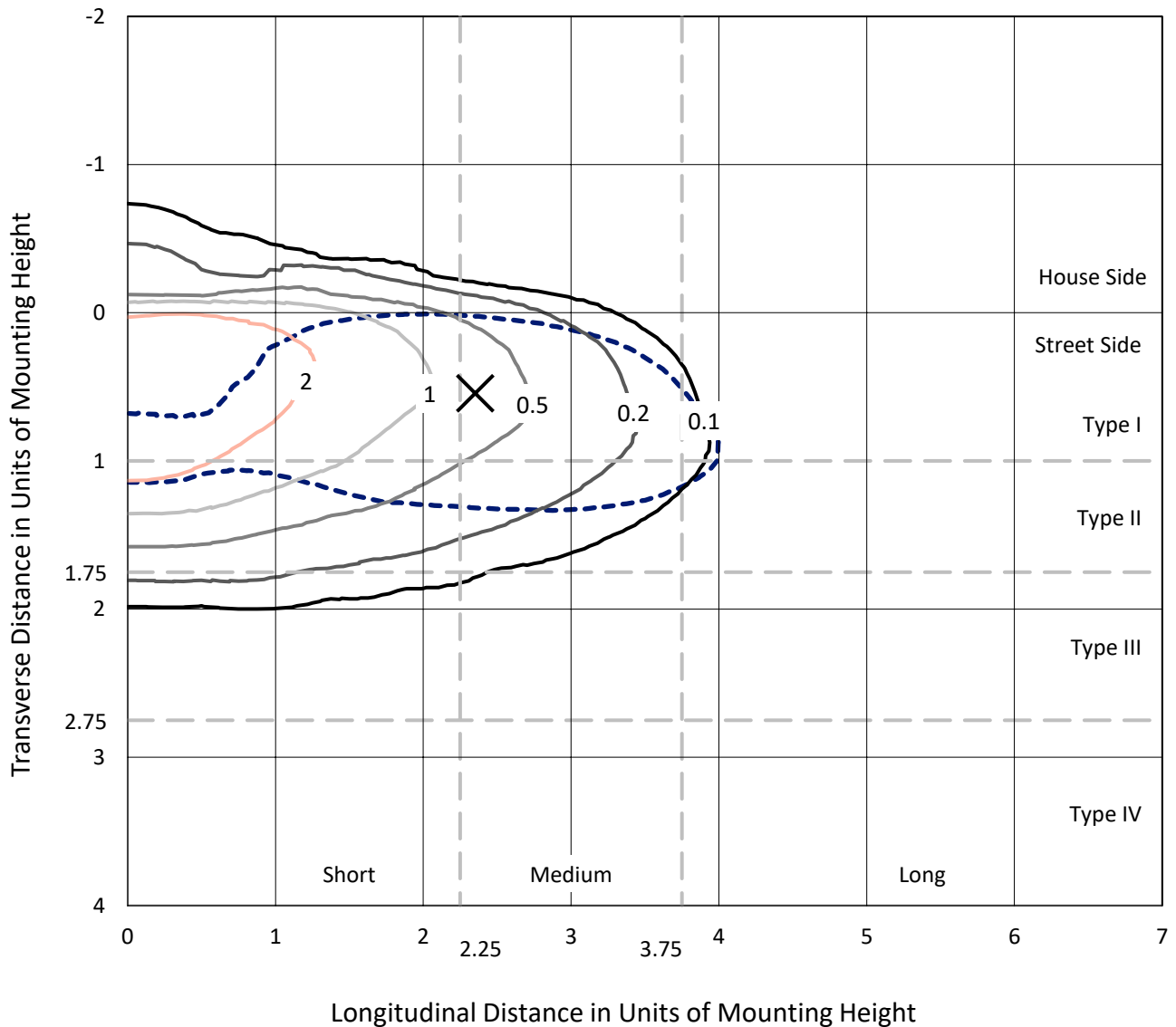
Lumens per Lamp: N/A  
Luminaire Lumens: 9065.1 lumens  
Efficiency: N/A  
Efficacy: 122.7 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type II - Medium  
BUG Rating: B1 - U0 - G2  
  
Input Watts (W): 73.9  
Input Voltage (V): NR  
Input Current (Ain): NR  
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

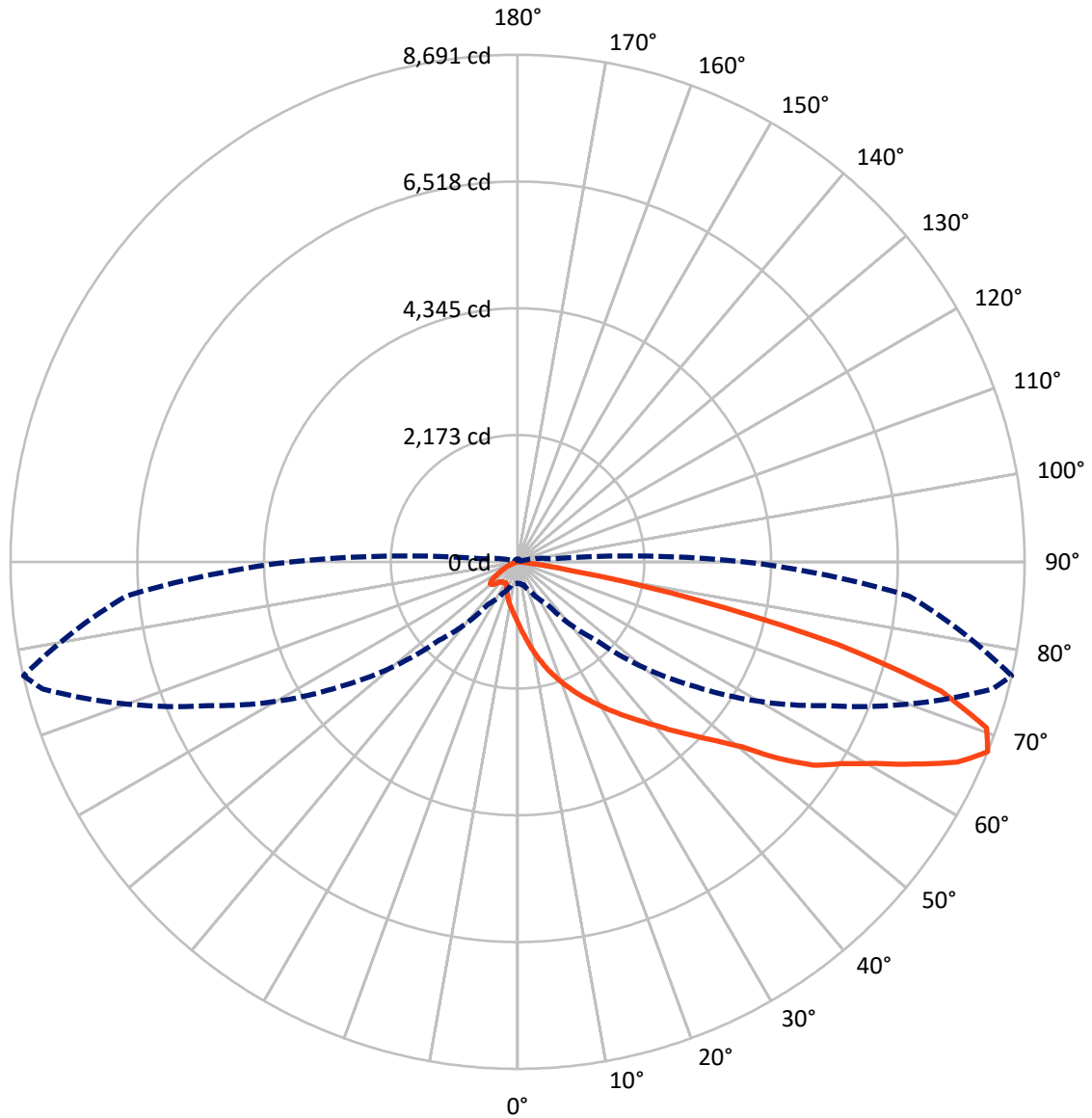
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.9 fc  
 Type II - Medium - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 77-Deg Lateral      - - - Horizontal Cone Through 67.5-Deg Vertical

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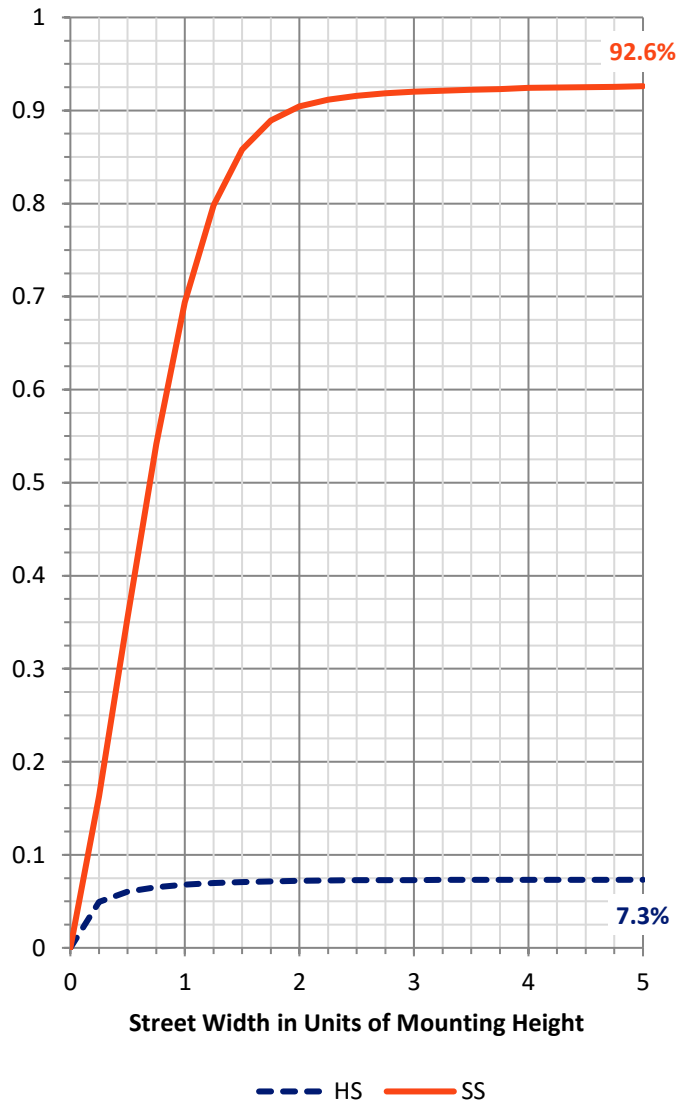
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	666.9	0.0	666.9
	% Fixture	7.4	0.0	7.4
<b>Street Side</b>	Lumens	8398.2	0.0	8398.2
	% Fixture	92.6	0.0	92.6
<b>Total</b>	Lumens	9065.1	0.0	9065.1
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	106.7	1.2
10°-20°	373.6	4.1
20°-30°	721.0	8.0
30°-40°	1251.7	13.8
40°-50°	1817.4	20.0
50°-60°	2087.1	23.0
60°-70°	1812.0	20.0
70°-80°	853.4	9.4
80°-90°	42.2	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°	9065.1	100.0
0°-180°	9065.1	100.0

**Coefficient of Utilization**

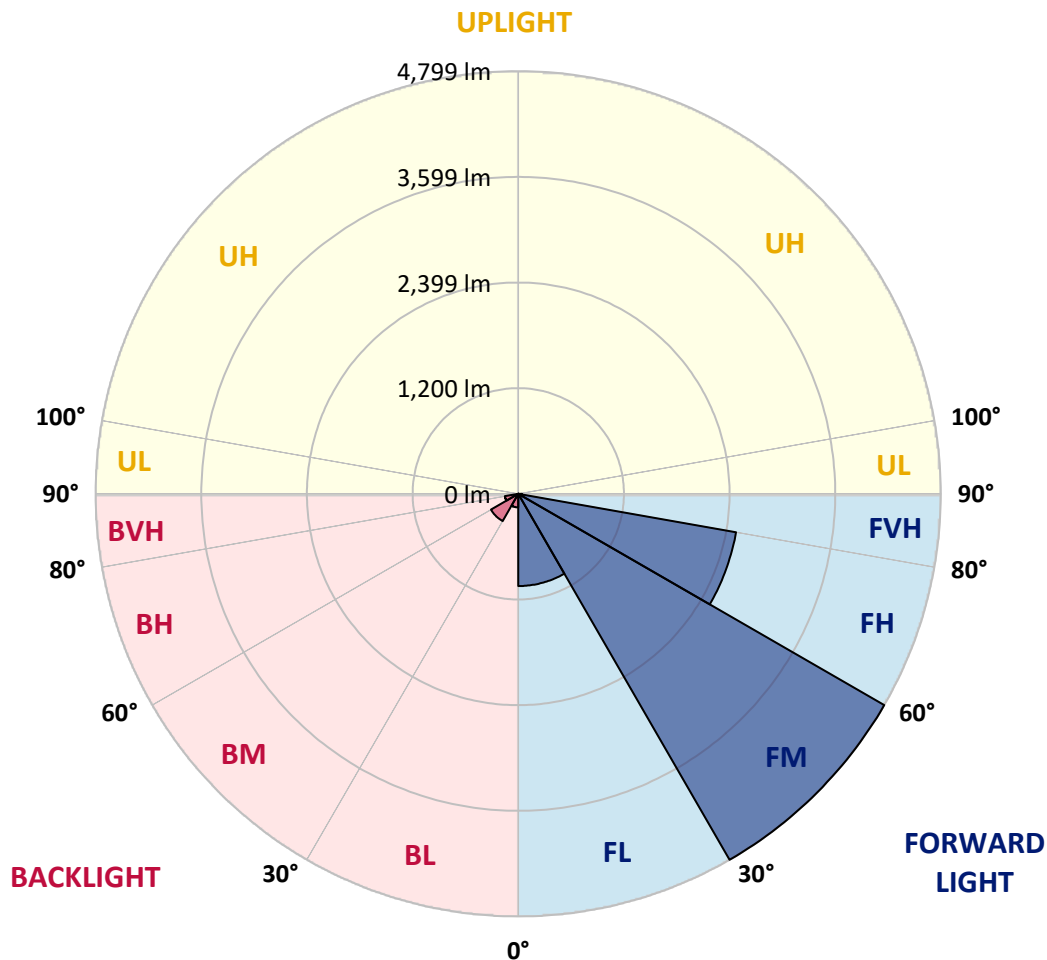


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1046.9	11.5			
FM (30°-60°)	4798.8	52.9			
FH (60°-80°)	2511.0	27.7			G2/5000
FVH (80°-90°)	41.4	0.5			G1/100
BL (0°-30°)	154.4	1.7	B1/500		
BM (30°-60°)	357.3	3.9	B1/1000		
BH (60°-80°)	154.4	1.7	B1/500		G1/500
BVH (80°-90°)	0.8	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B1-U0-G2**  
 Type II Medium



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77°	85°
0°	1045.3	1045.3	1045.3	1045.3	1045.3	1045.3	1045.3	1045.3	1045.3	1045.3	1045.3
2.5°	1447.3	1456.3	1443.3	1418.6	1381.4	1357.2	1298.1	1242.4	1180.4	1160.7	1098.8
5°	1764.2	1772.0	1757.5	1730.4	1680.9	1633.5	1555.9	1439.4	1318.4	1279.5	1169.7
7.5°	1999.0	2003.5	1997.8	1973.0	1925.8	1872.3	1785.6	1647.7	1468.1	1425.3	1257.0
10°	2167.8	2182.4	2180.8	2171.2	2139.7	2096.3	2004.0	1846.9	1635.8	1580.7	1355.5
12.5°	2279.8	2296.1	2305.7	2327.1	2325.4	2297.8	2216.8	2050.7	1803.1	1738.3	1466.4
15°	2312.5	2329.9	2366.5	2416.0	2460.0	2474.0	2417.2	2250.6	1987.1	1904.3	1580.1
17.5°	2293.8	2320.9	2364.8	2443.1	2539.3	2602.9	2596.7	2443.6	2154.2	2059.7	1691.6
20°	2335.0	2360.9	2395.2	2461.1	2573.1	2688.5	2734.7	2628.3	2320.4	2221.3	1808.6
22.5°	2562.4	2557.9	2561.3	2571.9	2639.0	2753.3	2848.4	2796.0	2484.7	2383.4	1932.5
25°	2922.7	2902.4	2868.1	2810.0	2793.2	2848.4	2947.5	2944.6	2658.1	2549.5	2059.1
27.5°	3335.9	3332.5	3252.0	3112.4	3033.6	3012.2	3059.4	3089.2	2829.8	2713.8	2186.3
30°	3731.6	3740.6	3632.0	3476.6	3331.9	3248.0	3205.3	3226.6	3004.3	2891.1	2317.5
32.5°	4076.1	4085.6	3967.5	3785.6	3606.7	3505.3	3415.2	3362.3	3194.5	3071.3	2461.6
35°	4367.1	4376.6	4241.0	4040.0	3849.3	3757.4	3655.6	3510.9	3386.0	3271.1	2622.1
37.5°	4627.2	4624.4	4442.6	4239.9	4052.4	3979.9	3926.4	3693.9	3583.0	3472.1	2800.0
40°	4780.9	4792.7	4637.3	4413.9	4232.0	4179.1	4175.7	3920.7	3810.4	3702.9	2994.7
42.5°	4825.9	4846.7	4734.2	4550.6	4385.7	4328.3	4416.6	4166.1	4075.0	3970.2	3214.8
45°	4744.8	4765.1	4713.9	4586.7	4490.4	4453.2	4623.8	4420.6	4357.6	4254.0	3463.1
47.5°	4508.5	4533.8	4546.1	4519.1	4518.0	4555.7	4809.6	4688.6	4693.1	4587.2	3750.7
50°	4050.8	4093.5	4207.2	4303.0	4451.0	4636.8	4990.3	4979.0	5071.3	4980.2	4125.6
52.5°	3218.8	3279.6	3671.3	3933.1	4265.8	4621.5	5189.0	5445.1	5735.0	5601.6	4654.2
55°	2586.6	2586.6	2905.3	3395.0	3904.4	4521.4	5275.7	5748.0	6187.0	6155.5	5026.3
57.5°	2108.7	2134.0	2337.2	2770.2	3381.5	4282.7	5329.2	5938.2	6551.3	6528.1	5390.0
60°	1301.4	1356.1	1739.9	2167.3	2786.5	3857.7	5295.4	6130.7	6993.2	7011.7	5827.8
62.5°	732.9	753.2	924.3	1559.3	2166.6	3286.4	5037.0	6238.3	7558.4	7637.1	6279.4
65°	506.0	516.2	582.1	970.5	1501.8	2616.4	4532.0	6171.3	8124.6	8283.9	6662.1
67.5°	367.6	372.7	413.8	592.8	891.1	1897.1	3740.6	5833.5	8424.7	8690.9	6735.3
70°	282.6	286.0	315.8	389.5	526.3	1170.9	2716.7	5162.0	8207.4	8525.4	6360.4
72.5°	229.7	233.1	256.1	288.2	349.0	692.4	1646.6	4192.0	7248.2	7591.6	5414.7
75°	193.6	198.1	218.9	239.8	273.6	444.7	772.3	2919.3	5450.7	5675.9	3765.3
77.5°	107.5	99.1	177.8	198.7	230.8	281.5	361.4	1718.0	3052.7	3115.2	1670.7
80°	67.0	69.3	141.2	159.9	177.3	141.9	165.5	661.4	1058.3	1005.4	323.7
82.5°	3.9	9.0	108.6	115.4	121.6	60.8	62.5	224.6	255.0	234.2	57.4
85°	0.0	0.0	49.5	40.0	42.2	17.4	18.0	52.4	34.3	37.1	11.3
87.5°	0.0	0.0	0.0	1.1	0.0	1.6	3.4	4.5	1.6	2.3	3.9
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°	1045.3	1045.3	1045.3	1045.3	1045.3	1045.3	1045.3	1045.3	1045.3	1045.3	1045.3
2.5°	1059.4	1020.0	940.0	861.8	798.2	739.1	696.9	656.9	636.6	635.5	634.4
5°	1091.5	1008.7	848.9	707.6	593.9	502.7	443.6	401.4	380.0	372.7	371.6
7.5°	1136.5	1012.1	769.0	572.5	438.5	360.3	326.5	312.9	308.5	303.4	302.3
10°	1193.4	1020.0	697.4	461.0	345.6	306.3	292.7	287.1	283.7	280.3	279.2
12.5°	1257.0	1027.4	626.5	382.7	304.0	283.7	274.2	267.4	262.9	258.9	257.8
15°	1318.9	1031.9	552.8	328.2	282.6	266.3	256.1	248.8	242.6	238.1	237.6
17.5°	1380.3	1038.0	483.6	295.5	265.2	248.8	238.7	229.7	224.6	219.6	218.9
20°	1448.4	1036.9	418.2	272.4	247.6	231.3	220.7	212.2	207.2	201.5	201.0
22.5°	1511.5	1031.3	360.8	252.8	229.7	213.9	202.1	193.6	188.6	184.1	183.5
25°	1584.0	1026.7	312.9	234.7	212.8	197.0	184.1	176.2	170.6	166.7	166.0
27.5°	1653.8	1020.0	278.1	218.4	196.5	181.2	168.9	159.9	154.8	152.0	152.0
30°	1722.5	1018.3	265.2	202.6	181.8	166.7	154.3	145.8	141.9	140.7	140.1
32.5°	1805.2	1022.8	270.8	197.0	168.3	153.1	141.2	135.1	131.2	131.2	131.2
35°	1893.7	1021.7	279.2	202.1	159.3	139.6	130.6	126.7	122.7	122.7	122.7
37.5°	2004.6	1023.4	286.0	210.5	155.9	128.3	123.3	118.2	115.9	115.9	115.9
40°	2170.0	1079.1	282.6	217.8	154.8	120.4	110.3	108.6	106.9	106.9	106.9
42.5°	2372.7	1200.2	287.1	218.4	154.3	114.8	101.4	104.7	100.8	100.2	99.6
45°	2594.5	1332.4	315.8	206.6	153.6	112.0	96.9	100.8	94.6	94.6	94.6
47.5°	2814.5	1463.6	345.1	189.7	152.0	111.4	92.9	90.6	89.0	89.5	89.5
50°	3118.0	1570.5	356.3	166.7	148.0	110.3	85.6	86.1	85.0	86.1	86.1
52.5°	3448.4	1593.1	342.9	140.7	136.8	106.9	80.5	82.7	82.2	83.3	83.3
55°	3654.4	1568.9	283.1	117.1	119.3	93.5	75.4	79.9	79.9	79.9	79.9
57.5°	3867.2	1465.9	201.0	95.1	99.1	76.6	70.9	77.1	76.6	76.0	76.0
60°	4020.4	1299.2	132.3	78.2	78.8	63.0	65.9	72.6	72.1	69.3	69.3
62.5°	4134.6	1115.1	85.0	66.4	60.3	56.9	60.3	65.9	63.7	57.4	56.3
65°	4121.7	860.2	65.3	56.9	49.5	49.5	52.4	57.4	50.6	40.5	39.4
67.5°	3881.4	582.1	54.0	47.9	41.6	41.1	43.4	47.9	43.4	34.3	33.2
70°	3451.8	380.6	43.4	37.1	33.2	30.4	34.8	41.1	36.6	27.6	26.4
72.5°	2801.6	232.0	32.7	27.1	24.2	19.7	27.6	33.8	29.3	20.3	19.2
75°	1812.6	118.2	22.5	17.4	12.9	11.8	20.3	25.3	20.3	12.4	10.7
77.5°	693.5	49.5	12.4	7.9	6.8	5.6	11.3	15.2	8.4	2.8	2.3
80°	133.5	20.8	6.1	3.9	3.4	2.3	1.6	1.1	0.0	0.0	0.0
82.5°	23.1	6.8	2.3	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	7.9	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	2.8	0.0	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)