

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: P967112

Luminaire Tested: **NAV-SB4D-722-U-T2U-HSS**

Issue Date: 1/21/2025

**Test Information**

Test Method: LM-79-08  
Report Number: P967112  
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-SB4D-722-U-T2U-HSS  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(4) 70 CRI, 2200K, 900mA 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: 26391.7 lumens  
Efficiency: N/A  
Efficacy: 89.9 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B3 - U0 - G3

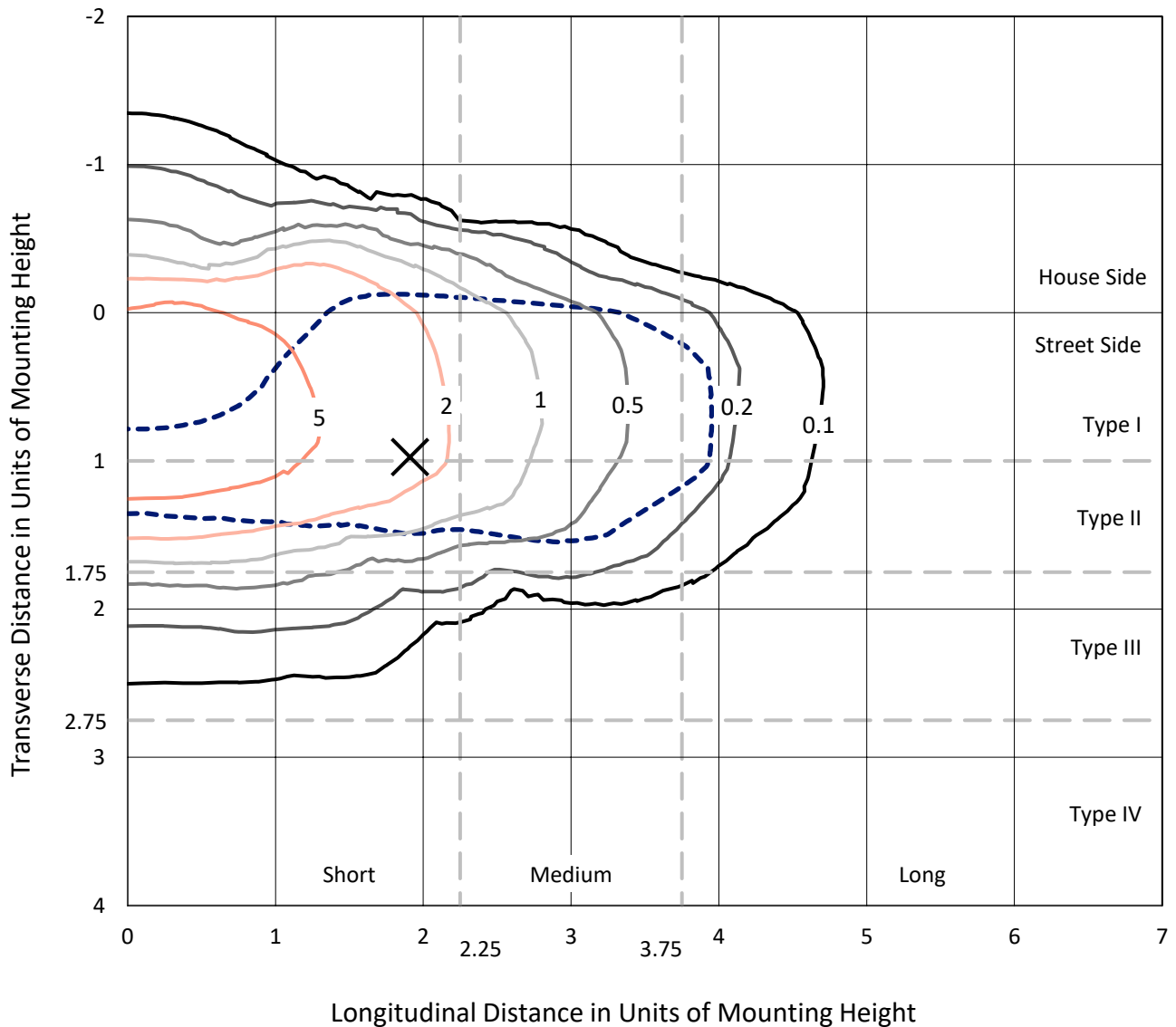
Input Watts (W): 293.6  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

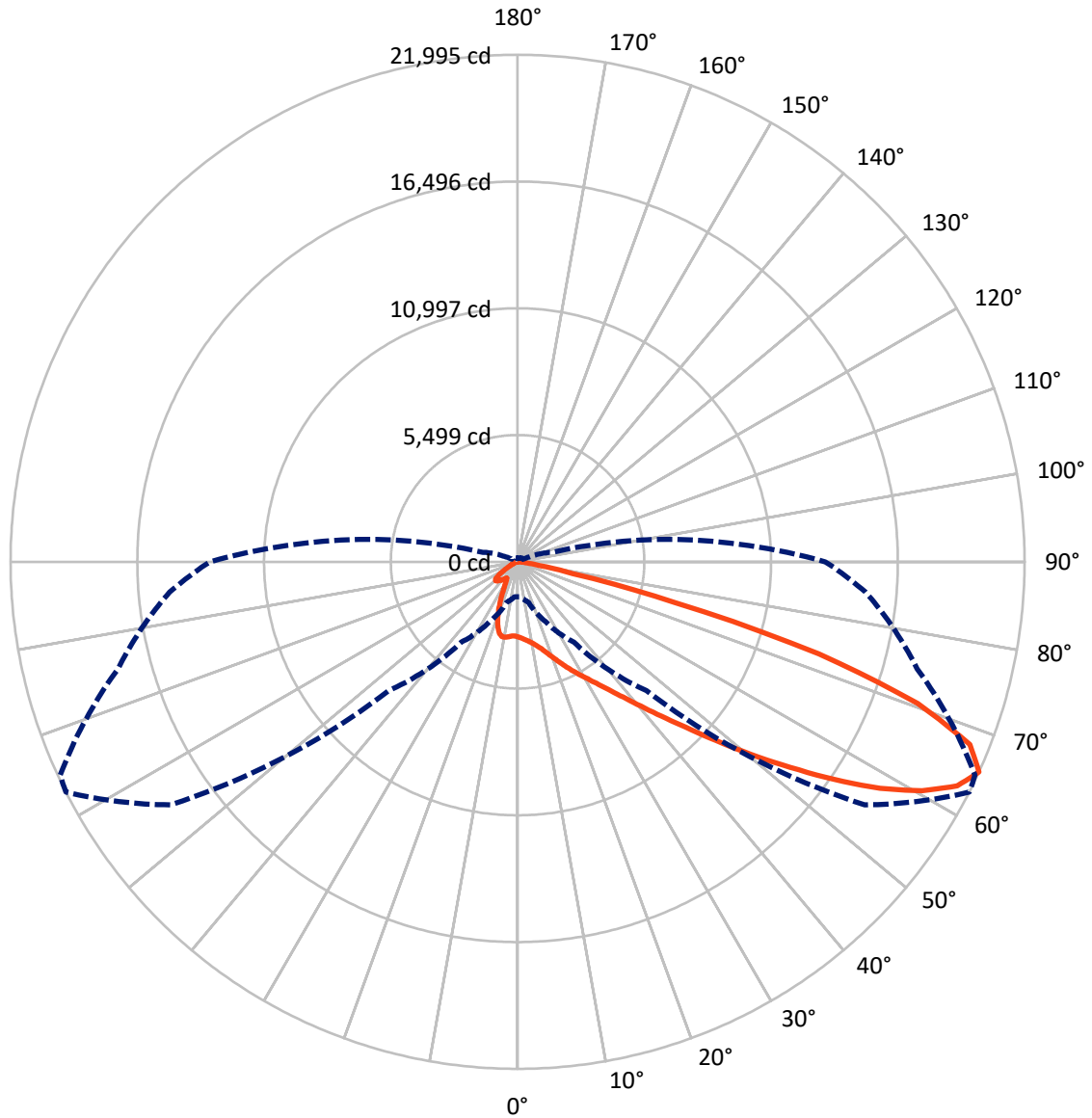
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.9 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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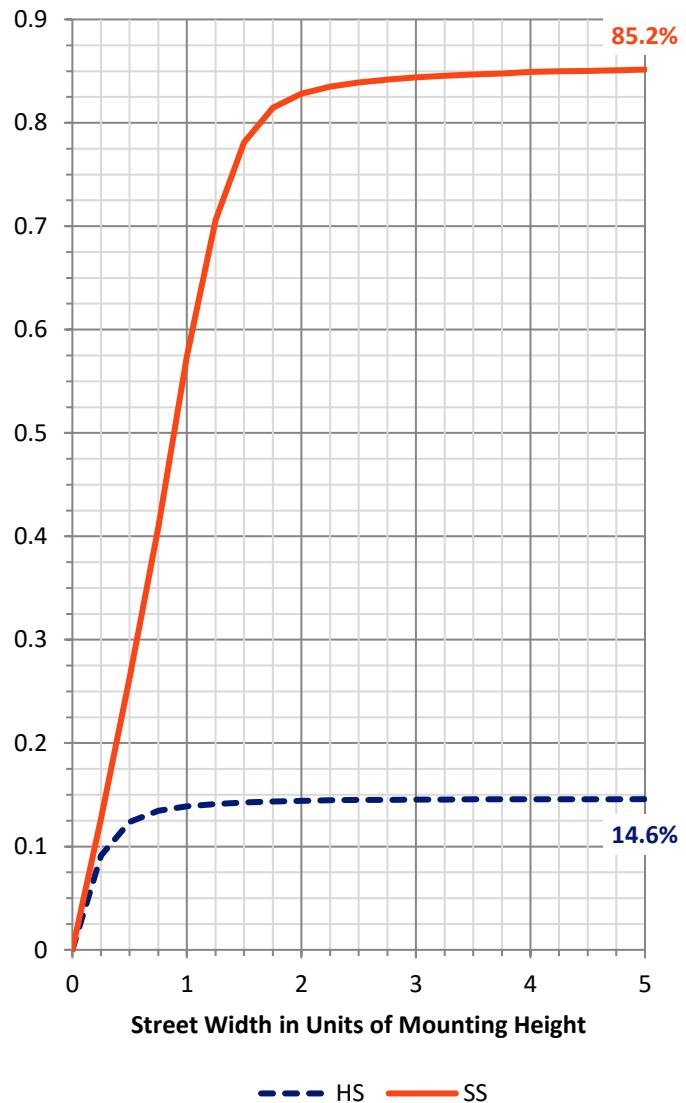
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	3879.4	0.0	3879.4
	% Fixture	14.7	0.0	14.7
<b>Street Side</b>	Lumens	22512.3	0.0	22512.3
	% Fixture	85.3	0.0	85.3
<b>Total</b>	Lumens	26391.7	0.0	26391.7
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	306.9	1.2
10°-20°	851.5	3.2
20°-30°	1482.7	5.6
30°-40°	2672.4	10.1
40°-50°	5300.3	20.1
50°-60°	7219.8	27.4
60°-70°	5762.8	21.8
70°-80°	2607.8	9.9
80°-90°	187.4	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°	26391.7	100.0
0°-180°	26391.7	100.0

**Coefficient of Utilization**



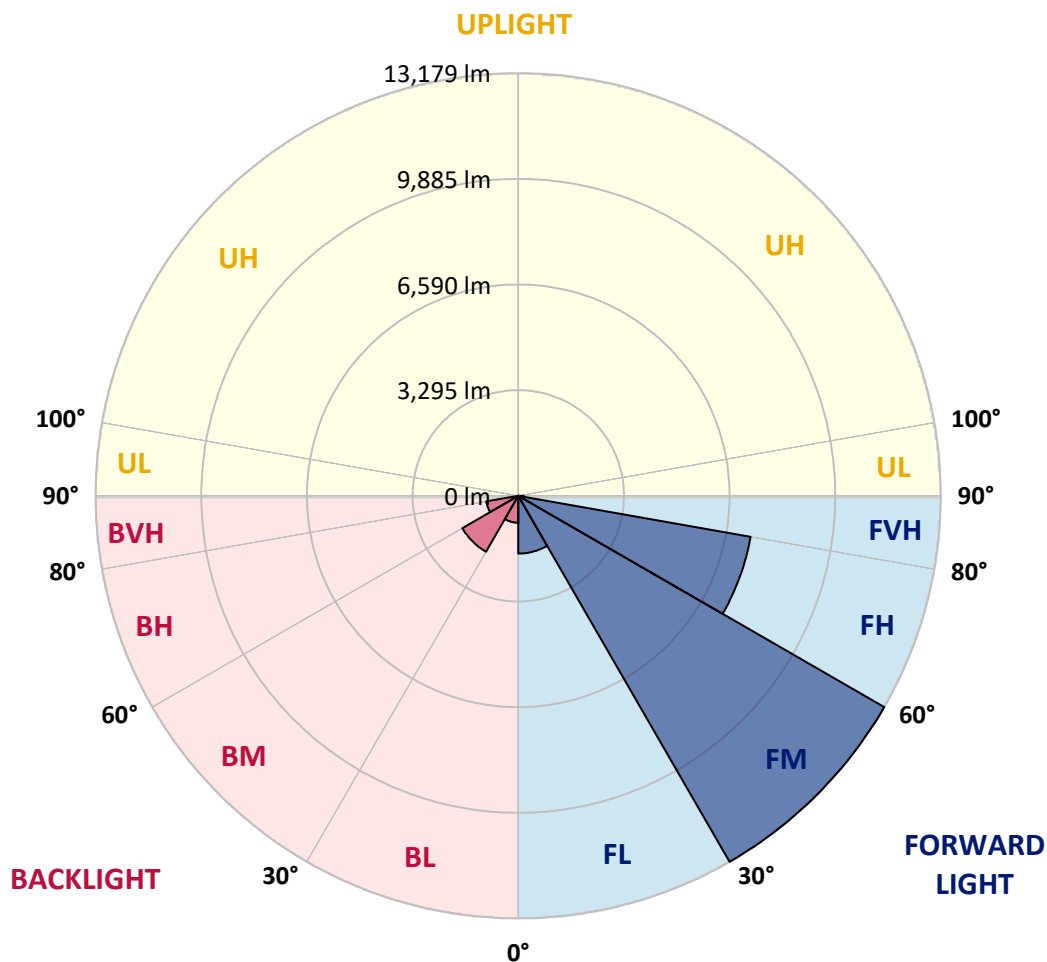
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1801.6	6.8			
FM (30°-60°)	13179.3	49.9			
FH (60°-80°)	7357.9	27.9			G3/7500
FVH (80°-90°)	173.5	0.7			G2/225
BL (0°-30°)	839.6	3.2	B2/1000		
BM (30°-60°)	2013.2	7.6	B2/2500		
BH (60°-80°)	1012.8	3.8	B3/2500		G3/2500
BVH (80°-90°)	13.9	0.1			G1/100
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°	63°	65°	75°	85°
0°	3257.2	3257.2	3257.2	3257.2	3257.2	3257.2	3257.2	3257.2	3257.2	3257.2	3257.2
2.5°	3333.5	3324.4	3337.1	3331.7	3328.1	3320.8	3317.1	3313.5	3306.2	3300.8	3279.0
5°	3342.5	3337.1	3349.8	3360.8	3371.6	3382.5	3387.9	3395.2	3387.9	3373.5	3351.6
7.5°	3266.3	3262.7	3289.9	3322.6	3371.6	3413.4	3458.8	3484.2	3486.0	3480.6	3456.9
10°	3260.8	3251.8	3279.0	3319.0	3382.5	3456.9	3536.9	3591.3	3598.6	3622.1	3596.7
12.5°	3346.2	3337.1	3375.2	3418.8	3484.2	3562.3	3660.3	3736.5	3747.5	3780.1	3762.0
15°	3489.6	3476.9	3520.5	3576.7	3660.3	3749.2	3852.8	3921.8	3930.9	3970.7	3938.0
17.5°	3656.7	3644.0	3694.8	3754.7	3845.5	3967.2	4087.0	4163.2	4174.1	4199.5	4139.7
20°	3870.9	3854.6	3894.5	3949.0	4045.3	4190.5	4333.9	4442.9	4441.0	4441.0	4343.0
22.5°	4119.7	4094.3	4128.7	4172.3	4263.1	4439.2	4629.8	4758.8	4758.8	4707.9	4546.3
25°	4386.6	4361.2	4399.3	4439.2	4519.1	4718.8	4942.1	5101.9	5109.2	5022.0	4764.2
27.5°	4720.6	4687.9	4716.9	4764.2	4811.5	5014.7	5279.9	5465.0	5468.7	5334.3	4971.1
30°	5363.3	5270.8	5179.9	5129.1	5150.9	5352.4	5635.7	5840.9	5859.0	5673.8	5196.3
32.5°	6539.9	6521.8	6202.2	5784.6	5566.7	5715.6	6033.4	6280.3	6291.1	6053.3	5488.7
35°	8368.2	8346.5	7832.6	7037.3	6327.4	6202.2	6516.3	6808.6	6801.4	6532.6	5868.1
37.5°	10550.6	10530.6	9853.4	8789.5	7640.1	6937.5	7139.0	7445.9	7491.3	7139.0	6358.3
40°	12415.2	12340.8	11912.3	10886.5	9383.2	8157.6	8025.0	8228.4	8275.6	7858.1	6981.1
42.5°	13827.8	13764.3	13546.4	12905.5	11492.9	9962.4	9069.1	9147.1	9199.8	8698.7	7696.4
45°	14559.5	14545.0	14632.2	14572.2	13642.6	12177.4	10561.5	10236.5	10256.5	9630.1	8508.0
47.5°	14663.0	14655.8	15053.4	15616.2	15490.9	14675.7	12477.0	11594.6	11523.8	10681.3	9390.4
50°	14053.0	14038.4	14801.0	15855.8	16725.5	16774.5	14652.1	13125.1	12969.0	11768.8	10311.0
52.5°	12104.7	12101.2	13353.9	15109.6	17159.5	18611.9	16801.8	14806.4	14545.0	12920.0	11284.1
55°	9314.2	9381.3	10817.5	12892.8	16367.9	19496.2	18731.8	16672.9	16271.7	14078.4	12181.0
57.5°	6598.0	6696.0	8115.8	9964.1	13913.1	18973.3	20037.2	18543.0	18110.8	15233.1	13090.7
60°	3544.1	3631.3	5052.8	7258.8	10350.9	17023.3	20725.4	20166.2	19757.7	16329.8	13911.3
62.5°	2111.6	2140.6	2728.9	4686.1	7001.1	13005.3	20433.1	21402.6	21066.7	17250.2	14624.9
65°	1516.1	1521.5	1817.4	2861.4	4250.4	7901.6	18383.2	21994.6	21891.0	17943.9	15153.2
67.5°	1276.4	1272.7	1396.3	1901.0	2895.9	3958.0	14089.2	21157.5	21596.9	18383.2	15452.8
70°	1094.8	1100.2	1245.5	1392.6	2176.9	2240.4	7004.6	18421.3	19358.3	18499.4	15434.7
72.5°	815.2	833.3	967.7	1269.2	1643.2	1541.5	2418.4	13658.9	15353.0	17430.0	14633.9
75°	575.5	584.7	680.9	1067.5	1225.6	1122.1	1234.6	7061.0	9232.5	13363.0	11977.7
77.5°	443.0	459.3	515.7	746.2	1207.3	788.0	755.3	2443.8	3754.7	8072.3	8212.1
80°	239.6	268.8	372.2	539.3	847.9	557.4	374.0	973.1	1272.7	3774.7	3166.4
82.5°	123.5	138.0	259.6	388.6	483.0	486.6	185.2	404.9	524.7	1165.6	434.0
85°	49.0	60.0	174.2	214.2	248.8	239.6	83.5	163.4	188.8	323.2	132.5
87.5°	10.9	18.1	63.6	49.0	47.3	50.8	20.0	38.1	36.3	38.1	23.6
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°	3257.2	3257.2	3257.2	3257.2	3257.2	3257.2	3257.2	3257.2	3257.2	3257.2	3257.2
2.5°	3277.2	3270.0	3250.0	3228.1	3202.7	3188.3	3179.1	3177.4	3164.7	3155.6	3164.7
5°	3331.7	3324.4	3286.3	3240.8	3191.8	3153.7	3117.4	3084.7	3037.6	3028.5	3024.9
7.5°	3440.6	3420.6	3358.9	3297.2	3204.6	3093.9	2959.5	2805.1	2667.2	2625.4	2605.4
10°	3575.0	3547.7	3469.6	3360.8	3155.6	2854.2	2529.2	2227.7	1988.1	1921.0	1895.5
12.5°	3727.5	3703.8	3600.4	3398.9	2950.4	2403.9	1906.4	1532.4	1300.0	1241.9	1225.6
15°	3909.0	3874.5	3731.1	3340.8	2583.6	1826.6	1309.0	1087.5	1004.1	993.1	982.3
17.5°	4101.5	4045.3	3847.3	3132.0	2089.8	1298.2	1011.3	947.7	911.4	900.6	895.1
20°	4277.6	4205.0	3916.3	2816.1	1561.5	1011.3	906.0	864.3	831.6	818.9	811.6
22.5°	4453.7	4350.2	3916.3	2385.7	1171.1	896.9	831.6	793.5	755.3	738.9	729.9
25°	4637.1	4499.1	3847.3	1906.4	942.3	822.5	760.8	719.0	686.3	666.4	659.1
27.5°	4815.0	4624.4	3689.4	1452.5	838.9	757.2	695.4	655.5	624.5	610.1	610.1
30°	4983.9	4747.9	3467.9	1102.1	771.6	693.6	635.5	601.0	570.1	555.6	557.4
32.5°	5212.6	4904.0	3231.8	904.2	713.5	633.7	581.0	548.3	521.1	510.1	510.1
35°	5530.4	5134.6	3028.5	887.9	664.5	584.7	532.0	501.1	473.9	464.8	464.8
37.5°	5980.7	5506.8	2921.4	996.8	624.5	541.1	492.0	459.3	434.0	426.7	424.9
40°	6536.2	6011.5	2979.5	1105.7	597.4	503.0	455.7	423.0	401.3	392.2	390.3
42.5°	7195.3	6634.3	3300.8	1189.2	579.2	470.3	421.3	384.9	370.4	366.7	366.7
45°	7952.5	7318.8	3792.8	1278.2	550.1	439.4	386.7	359.5	348.6	346.8	345.0
47.5°	8813.1	8070.4	4362.9	1389.0	521.1	410.3	359.5	341.3	332.3	328.6	328.6
50°	9666.4	8827.6	4949.4	1450.7	497.4	383.1	337.7	323.2	315.9	314.1	314.1
52.5°	10559.7	9606.5	5423.3	1392.6	477.5	361.3	319.6	308.6	301.3	299.6	299.6
55°	11411.2	10236.5	5505.0	1181.9	437.6	339.5	299.6	294.2	285.1	285.1	283.2
57.5°	12144.7	10552.4	4927.6	867.9	397.6	306.9	279.6	274.2	266.9	265.1	263.2
60°	12818.3	10461.7	3803.8	584.7	354.0	274.2	254.2	250.5	243.3	234.2	232.4
62.5°	13197.8	10062.2	2601.8	381.3	310.5	239.6	225.1	223.3	206.9	188.8	185.2
65°	13341.2	9241.5	1623.2	277.8	259.6	205.2	194.2	190.6	167.1	147.1	145.2
67.5°	13215.9	7890.8	818.9	219.7	205.2	170.7	159.8	159.8	143.4	125.3	123.5
70°	12714.8	5915.3	345.0	176.1	158.0	130.7	130.7	138.0	121.7	101.7	99.8
72.5°	11627.3	3979.9	183.4	134.4	118.0	92.6	107.1	112.5	96.2	76.3	76.3
75°	9243.3	2427.5	127.1	99.8	74.4	65.4	81.7	85.4	65.4	50.8	49.0
77.5°	6322.0	1394.4	85.4	63.6	47.3	38.1	56.3	52.7	34.5	23.6	25.4
80°	2776.1	581.0	49.0	29.0	18.1	14.6	20.0	14.6	10.9	7.3	7.3
82.5°	325.0	136.2	18.1	10.9	7.3	3.6	1.8	0.0	0.0	0.0	0.0
85°	67.1	16.3	9.1	3.6	1.8	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	12.7	3.6	1.8	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)