

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: P961344

Luminaire Tested: **NAV-SB2A-727-U-T2R-HSS**

Issue Date: 1/21/2025

**Test Information**

Test Method: LM-79-08  
Report Number: P961344  
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-SB2A-727-U-T2R-HSS  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(2) 70 CRI, 2700K, 350mA 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: 7221.1 lumens  
Efficiency: N/A  
Efficacy: 126.0 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type II - Medium  
BUG Rating: B1 - U0 - G2

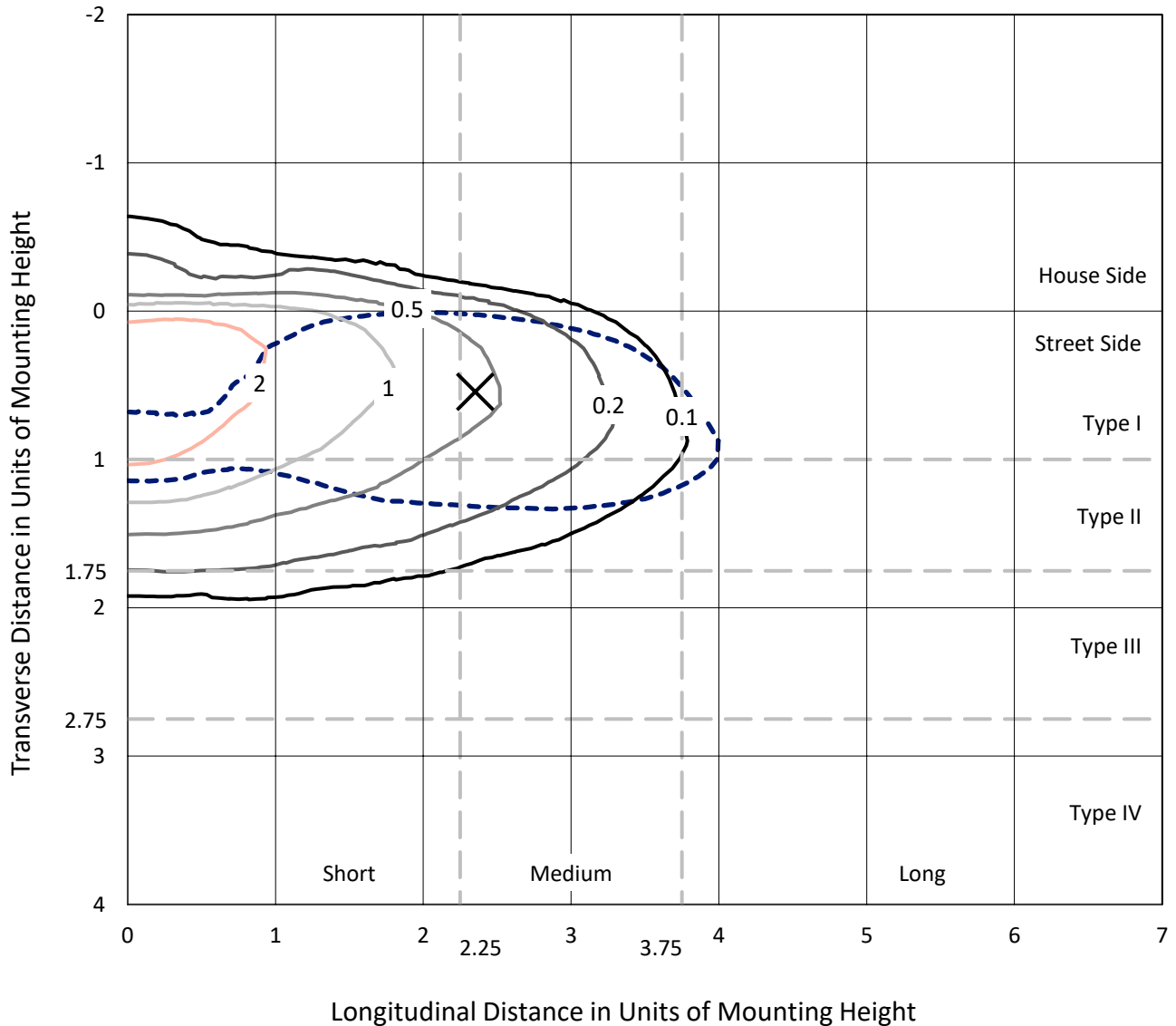
Input Watts (W): 57.3  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

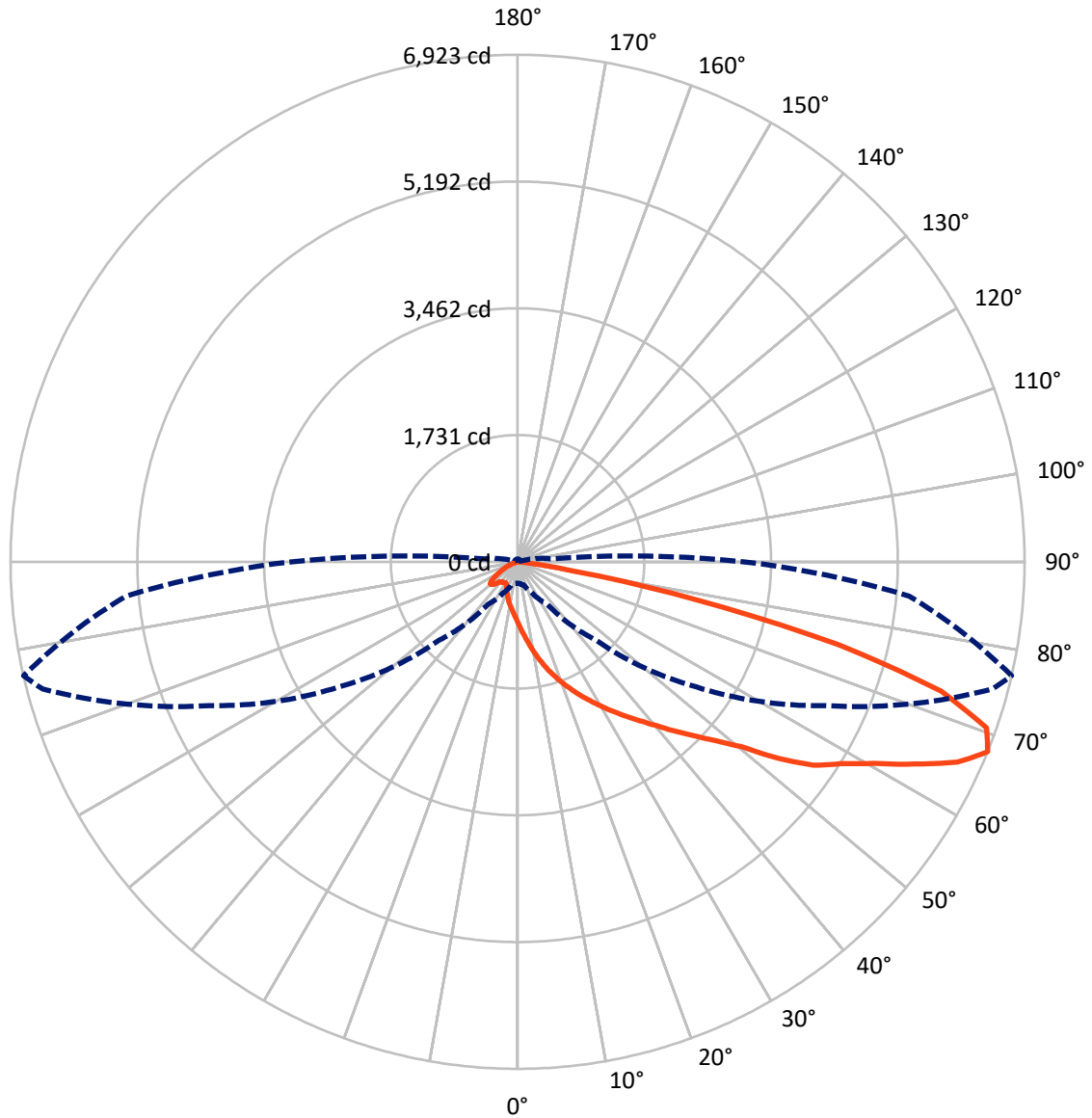
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.1 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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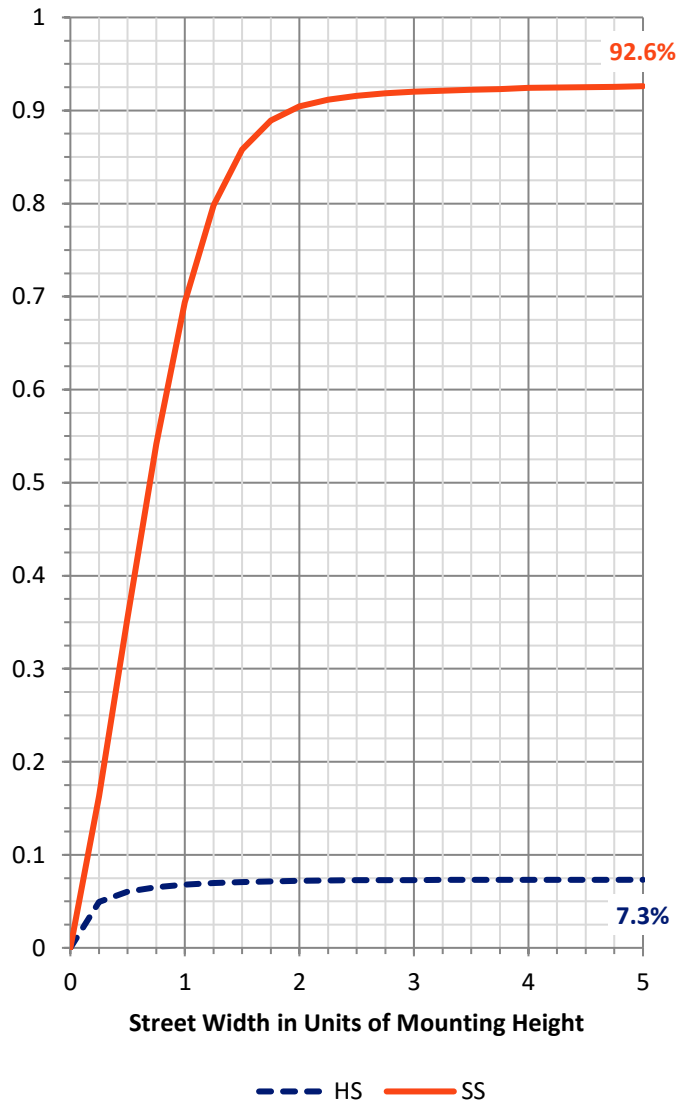
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	531.2	0.0	531.2
	% Fixture	7.4	0.0	7.4
<b>Street Side</b>	Lumens	6689.9	0.0	6689.9
	% Fixture	92.6	0.0	92.6
<b>Total</b>	Lumens	7221.1	0.0	7221.1
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	85.0	1.2
10°-20°	297.6	4.1
20°-30°	574.3	8.0
30°-40°	997.1	13.8
40°-50°	1447.7	20.0
50°-60°	1662.5	23.0
60°-70°	1443.4	20.0
70°-80°	679.8	9.4
80°-90°	33.6	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°	7221.1	100.0
0°-180°	7221.1	100.0

**Coefficient of Utilization**

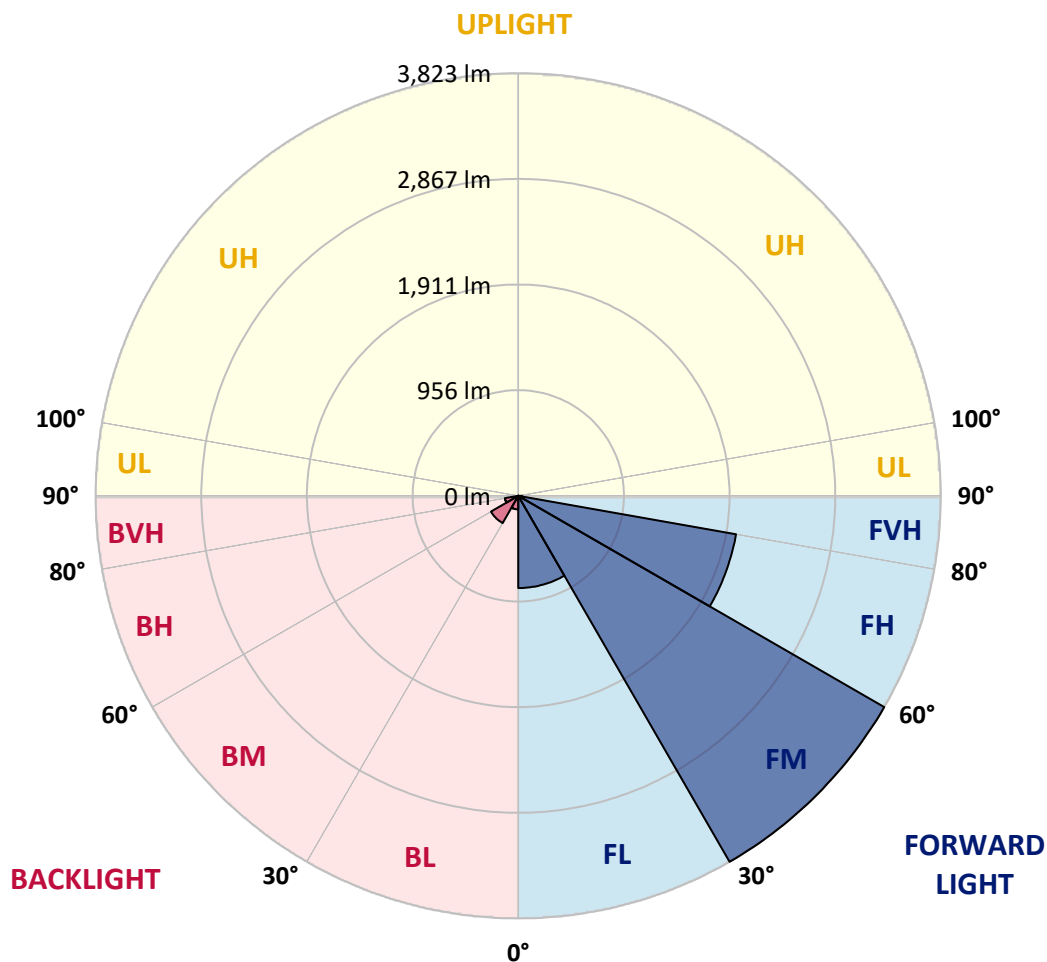


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	834.0	11.5			
FM (30°-60°)	3822.7	52.9			
FH (60°-80°)	2000.2	27.7			G2/5000
FVH (80°-90°)	33.0	0.5			G1/100
BL (0°-30°)	123.0	1.7	B1/500		
BM (30°-60°)	284.7	3.9	B1/1000		
BH (60°-80°)	123.0	1.7	B1/500		G1/500
BVH (80°-90°)	0.6	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°	832.7	832.7	832.7	832.7	832.7	832.7	832.7	832.7	832.7	832.7	832.7
2.5°	1152.8	1160.0	1149.7	1130.0	1100.4	1081.2	1034.0	989.6	940.3	924.7	875.4
5°	1405.3	1411.6	1399.9	1378.4	1339.0	1301.3	1239.4	1146.6	1050.2	1019.3	931.8
7.5°	1592.3	1595.9	1591.4	1571.7	1534.0	1491.4	1422.4	1312.5	1169.4	1135.4	1001.3
10°	1726.8	1738.5	1737.2	1729.5	1704.4	1669.9	1596.3	1471.3	1303.1	1259.1	1079.7
12.5°	1816.1	1829.1	1836.7	1853.7	1852.4	1830.4	1765.9	1633.5	1436.2	1384.7	1168.1
15°	1842.0	1856.0	1885.1	1924.5	1959.6	1970.8	1925.5	1792.7	1582.9	1517.0	1258.7
17.5°	1827.3	1848.8	1883.7	1946.1	2022.8	2073.5	2068.6	1946.6	1716.1	1640.7	1347.5
20°	1860.0	1880.7	1908.0	1960.4	2049.7	2141.6	2178.4	2093.7	1848.4	1769.5	1440.7
22.5°	2041.2	2037.6	2040.3	2048.8	2102.2	2193.2	2268.9	2227.2	1979.3	1898.6	1539.4
25°	2328.2	2312.0	2284.6	2238.5	2225.1	2268.9	2347.9	2345.6	2117.4	2030.8	1640.3
27.5°	2657.3	2654.6	2590.5	2479.3	2416.5	2399.4	2437.1	2460.9	2254.2	2161.8	1741.7
30°	2972.5	2979.7	2893.2	2769.3	2654.1	2587.3	2553.3	2570.3	2393.2	2303.1	1846.1
32.5°	3247.0	3254.6	3160.4	3015.5	2873.0	2792.3	2720.6	2678.3	2544.8	2446.6	1960.9
35°	3478.7	3486.4	3378.3	3218.3	3066.3	2993.1	2912.0	2796.7	2697.2	2605.8	2088.7
37.5°	3685.9	3683.7	3538.9	3377.5	3228.1	3170.3	3127.7	2942.5	2854.1	2765.8	2230.4
40°	3808.4	3817.8	3694.0	3516.0	3371.1	3329.0	3326.3	3123.2	3035.3	2949.6	2385.6
42.5°	3844.3	3860.9	3771.2	3625.0	3493.6	3447.8	3518.2	3318.7	3246.1	3162.6	2560.9
45°	3779.7	3795.8	3755.0	3653.7	3576.9	3547.4	3683.2	3521.4	3471.2	3388.6	2758.6
47.5°	3591.3	3611.5	3621.4	3599.9	3599.0	3629.0	3831.2	3734.8	3738.4	3654.1	2987.8
50°	3226.8	3260.8	3351.4	3427.7	3545.6	3693.6	3975.2	3966.2	4039.7	3967.1	3286.5
52.5°	2564.0	2612.4	2924.5	3133.0	3398.1	3681.5	4133.4	4337.5	4568.4	4462.1	3707.4
55°	2060.5	2060.5	2314.2	2704.4	3110.2	3601.6	4202.5	4578.8	4928.5	4903.4	4003.9
57.5°	1679.8	1700.0	1861.8	2206.6	2693.6	3411.5	4245.1	4730.3	5218.6	5200.2	4293.5
60°	1036.7	1080.2	1386.0	1726.4	2219.6	3073.0	4218.2	4883.6	5570.7	5585.4	4642.4
62.5°	583.8	599.9	736.3	1242.1	1725.9	2617.8	4012.4	4969.3	6020.8	6083.6	5002.0
65°	403.1	411.2	463.6	773.1	1196.4	2084.2	3610.2	4915.9	6472.0	6598.8	5306.9
67.5°	292.8	296.8	329.5	472.2	709.8	1511.2	2979.7	4646.9	6711.0	6923.1	5365.3
70°	225.1	227.8	251.5	310.3	419.2	932.6	2164.1	4112.0	6537.9	6791.2	5066.6
72.5°	183.0	185.6	204.1	229.6	278.0	551.6	1311.6	3339.3	5773.7	6047.3	4313.3
75°	154.3	157.8	174.5	191.1	217.9	354.2	615.2	2325.4	4342.0	4521.4	2999.5
77.5°	85.7	78.9	141.7	158.3	183.9	224.2	287.9	1368.6	2431.7	2481.5	1330.9
80°	53.4	55.1	112.5	127.3	141.2	113.0	131.8	526.8	843.1	800.8	257.8
82.5°	3.2	7.2	86.5	91.9	96.9	48.4	49.8	179.0	203.2	186.5	45.7
85°	0.0	0.0	39.5	31.9	33.6	13.9	14.3	41.7	27.4	29.6	8.9
87.5°	0.0	0.0	0.0	0.9	0.0	1.3	2.7	3.6	1.3	1.7	3.2
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°	832.7	832.7	832.7	832.7	832.7	832.7	832.7	832.7	832.7	832.7	832.7
2.5°	843.9	812.5	748.9	686.5	635.8	588.8	555.1	523.3	507.2	506.2	505.3
5°	869.5	803.6	676.2	563.6	473.0	400.5	353.3	319.7	302.7	296.8	295.9
7.5°	905.4	806.3	612.5	456.0	349.3	287.0	260.0	249.3	245.7	241.7	240.8
10°	950.6	812.5	555.6	367.3	275.3	244.0	233.2	228.7	226.0	223.3	222.4
12.5°	1001.3	818.4	499.1	304.9	242.1	226.0	218.4	213.0	209.4	206.2	205.4
15°	1050.6	821.9	440.3	261.4	225.1	212.1	204.1	198.2	193.3	189.7	189.2
17.5°	1099.5	826.9	385.2	235.4	211.3	198.2	190.1	183.0	179.0	174.9	174.5
20°	1153.7	825.9	333.1	217.0	197.3	184.3	175.8	169.0	165.0	160.5	160.1
22.5°	1204.0	821.5	287.4	201.3	183.0	170.4	161.0	154.3	150.3	146.7	146.2
25°	1261.9	817.9	249.3	187.0	169.5	156.9	146.7	140.3	135.9	132.7	132.3
27.5°	1317.4	812.5	221.5	173.9	156.5	144.4	134.5	127.3	123.3	121.1	121.1
30°	1372.2	811.2	211.3	161.4	144.8	132.7	122.9	116.1	113.0	112.1	111.6
32.5°	1438.1	814.8	215.7	156.9	134.1	122.0	112.5	107.6	104.4	104.4	104.4
35°	1508.5	813.8	222.4	161.0	126.9	111.2	104.0	100.9	97.8	97.8	97.8
37.5°	1596.8	815.2	227.8	167.7	124.2	102.2	98.2	94.2	92.4	92.4	92.4
40°	1728.7	859.6	225.1	173.5	123.3	95.9	87.8	86.5	85.2	85.2	85.2
42.5°	1890.1	956.0	228.7	173.9	122.9	91.4	80.7	83.4	80.3	79.8	79.3
45°	2066.7	1061.4	251.5	164.6	122.4	89.3	77.1	80.3	75.3	75.3	75.3
47.5°	2242.1	1165.8	274.9	151.1	121.1	88.8	74.0	72.2	70.8	71.3	71.3
50°	2483.8	1251.1	283.8	132.7	118.0	87.8	68.2	68.6	67.8	68.6	68.6
52.5°	2747.0	1269.1	273.1	112.1	109.0	85.2	64.2	65.9	65.5	66.3	66.3
55°	2911.1	1249.7	225.6	93.3	95.0	74.4	60.1	63.7	63.7	63.7	63.7
57.5°	3080.6	1167.7	160.1	75.7	78.9	61.0	56.5	61.4	61.0	60.6	60.6
60°	3202.6	1034.9	105.4	62.3	62.7	50.2	52.5	57.8	57.4	55.1	55.1
62.5°	3293.6	888.3	67.8	52.9	48.0	45.3	48.0	52.5	50.6	45.7	44.8
65°	3283.3	685.2	52.0	45.3	39.5	39.5	41.7	45.7	40.4	32.3	31.4
67.5°	3091.8	463.6	43.0	38.1	33.2	32.7	34.5	38.1	34.5	27.4	26.4
70°	2749.7	303.1	34.5	29.6	26.4	24.2	27.8	32.7	29.1	21.9	21.1
72.5°	2231.7	184.7	26.0	21.5	19.3	15.7	21.9	26.9	23.3	16.1	15.3
75°	1443.9	94.2	17.9	13.9	10.4	9.4	16.1	20.2	16.1	9.8	8.5
77.5°	552.5	39.5	9.8	6.3	5.3	4.5	8.9	12.1	6.8	2.3	1.7
80°	106.3	16.6	4.9	3.2	2.7	1.7	1.3	0.9	0.0	0.0	0.0
82.5°	18.3	5.3	1.7	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	6.3	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	2.3	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)