

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: P969964

Luminaire Tested: **NAV-SB6A-827-U-T2U-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P969964
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-SB6A-827-U-T2U-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(6) 80 CRI, 2700K, 350mA 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: 18528.9 lumens
Efficiency: N/A
Efficacy: 108.4 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B2 - U0 - G3

Input Watts (W): 170.9
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

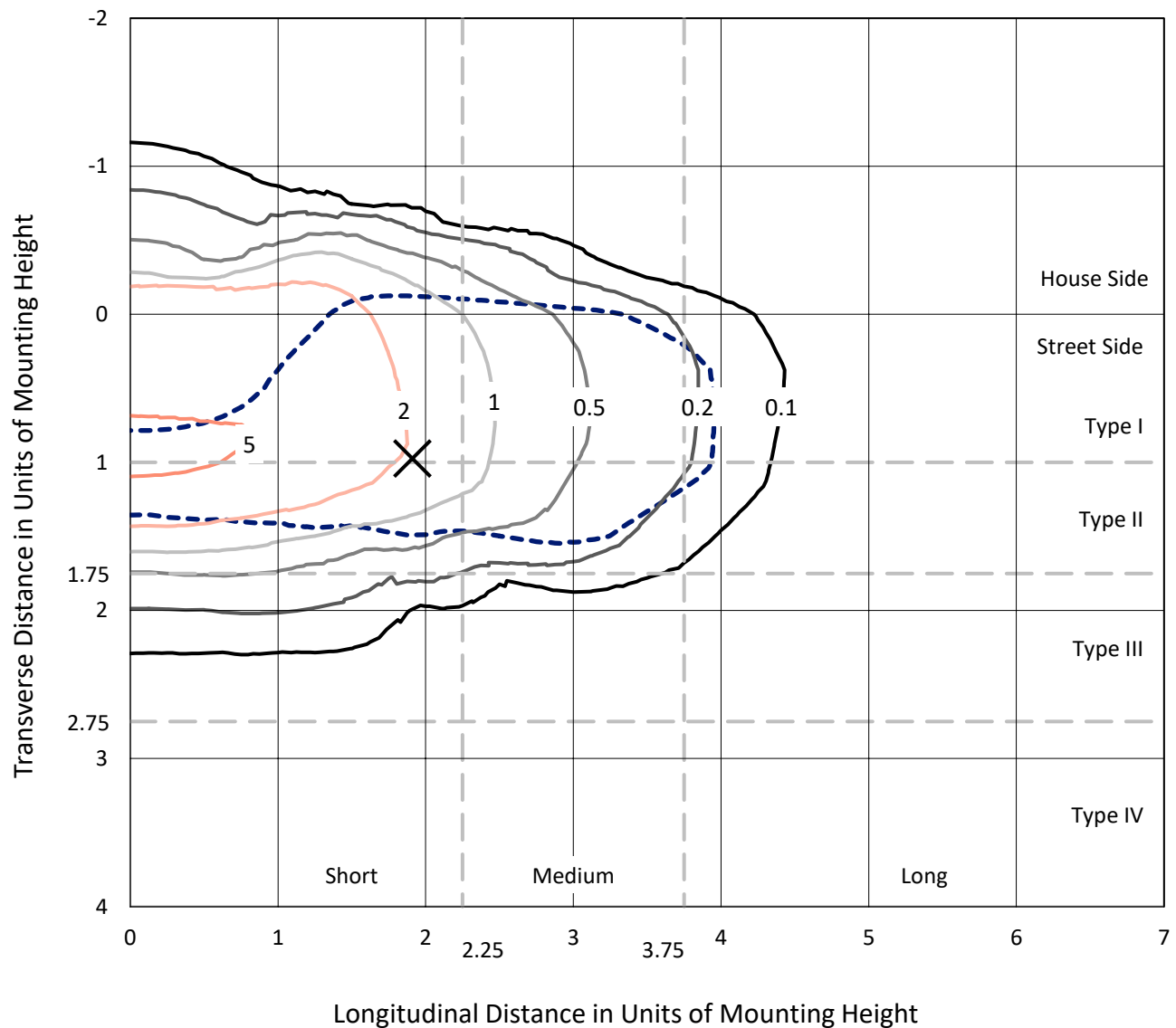


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Iso-Footcandle Lines of Horizontal Illumination

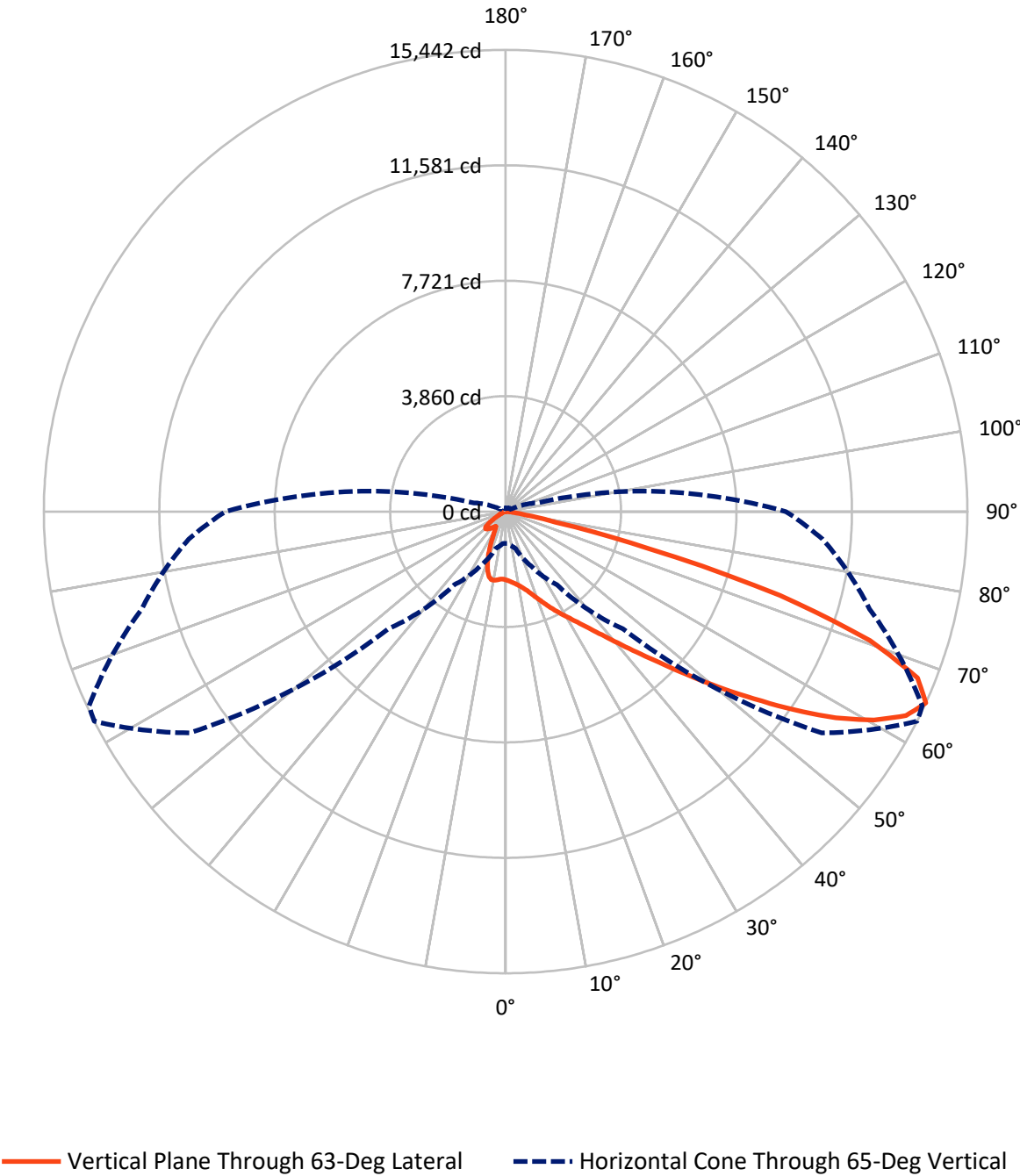
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.3 fc
Type II - Short - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2723.6	0.0	2723.6
	% Fixture	14.7	0.0	14.7
Street Side	Lumens	15805.3	0.0	15805.3
	% Fixture	85.3	0.0	85.3
Total	Lumens	18528.9	0.0	18528.9
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	215.5	1.2
10°-20°	597.8	3.2
20°-30°	1041.0	5.6
30°-40°	1876.2	10.1
40°-50°	3721.2	20.1
50°-60°	5068.9	27.4
60°-70°	4045.9	21.8
70°-80°	1830.9	9.9
80°-90°	131.6	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°	18528.9	100.0
0°-180°	18528.9	100.0

Coefficient of Utilization



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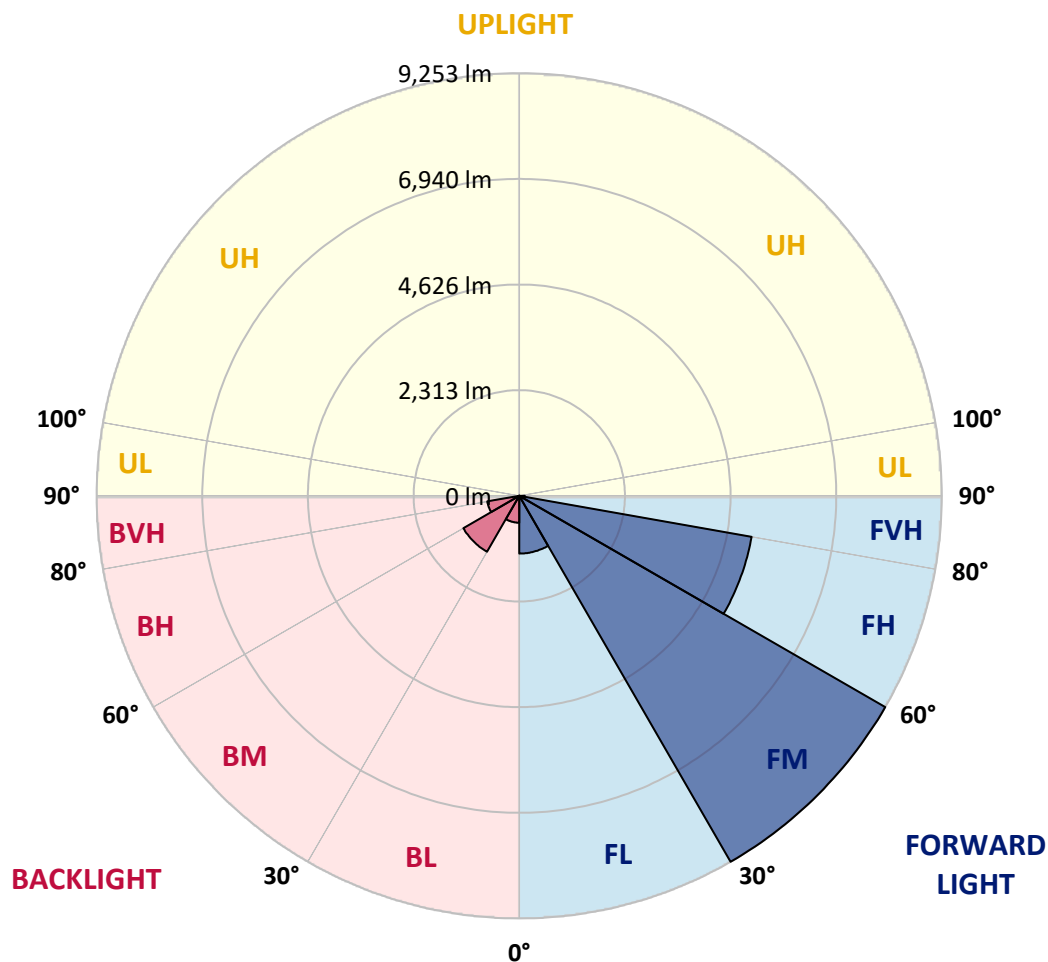
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1264.8	6.8			
FM	(30°-60°)	9252.9	49.9			
FH	(60°-80°)	5165.8	27.9			G3/7500
FVH	(80°-90°)	121.8	0.7			G2/225
BL	(0°-30°)	589.4	3.2	B2/1000		
BM	(30°-60°)	1413.4	7.6	B2/2500		
BH	(60°-80°)	711.0	3.8	B2/1000		G2/1000
BVH	(80°-90°)	9.8	0.1			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 II Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	63°	65°	75°	85°
0°	2286.8	2286.8	2286.8	2286.8	2286.8	2286.8	2286.8	2286.8	2286.8	2286.8	2286.8
2.5°	2340.4	2334.0	2342.9	2339.0	2336.5	2331.5	2328.9	2326.3	2321.2	2317.4	2302.1
5°	2346.7	2342.9	2351.9	2359.4	2367.1	2374.8	2378.6	2383.7	2378.6	2368.4	2353.1
7.5°	2293.2	2290.7	2309.7	2332.7	2367.1	2396.4	2428.3	2446.2	2447.4	2443.6	2427.0
10°	2289.3	2283.0	2302.1	2330.1	2374.8	2427.0	2483.2	2521.4	2526.4	2543.0	2525.2
12.5°	2349.3	2342.9	2369.7	2400.2	2446.2	2501.0	2569.8	2623.4	2631.0	2653.9	2641.2
15°	2450.0	2441.0	2471.7	2511.1	2569.8	2632.3	2704.9	2753.4	2759.7	2787.8	2764.8
17.5°	2567.2	2558.3	2594.1	2636.1	2699.8	2785.2	2869.4	2922.9	2930.6	2948.4	2906.3
20°	2717.7	2706.2	2734.3	2772.5	2840.1	2942.1	3042.7	3119.2	3117.9	3117.9	3049.1
22.5°	2892.3	2874.4	2898.7	2929.2	2993.0	3116.6	3250.5	3341.0	3341.0	3305.3	3191.8
25°	3079.7	3061.9	3088.6	3116.6	3172.8	3313.0	3469.7	3582.0	3587.0	3525.8	3344.8
27.5°	3314.2	3291.3	3311.7	3344.8	3378.0	3520.8	3706.8	3836.9	3839.4	3745.0	3490.1
30°	3765.4	3700.5	3636.7	3601.0	3616.3	3757.9	3956.7	4100.7	4113.4	3983.5	3648.2
32.5°	4591.5	4578.8	4354.4	4061.3	3908.2	4012.8	4235.8	4409.2	4416.8	4249.9	3853.4
35°	5875.1	5859.8	5499.1	4940.7	4442.3	4354.4	4574.9	4780.2	4775.1	4586.4	4119.9
37.5°	7407.3	7393.3	6917.8	6170.8	5363.9	4870.6	5012.1	5227.6	5259.5	5012.1	4464.0
40°	8716.4	8664.1	8363.4	7643.1	6587.7	5727.3	5634.2	5777.0	5810.1	5517.0	4901.2
42.5°	9708.2	9663.5	9510.6	9060.6	8068.9	6994.3	6367.2	6421.9	6458.9	6107.2	5403.5
45°	10221.8	10211.7	10272.9	10230.7	9578.1	8549.4	7415.0	7186.8	7200.8	6761.0	5973.3
47.5°	10294.5	10289.5	10568.6	10963.7	10875.8	10303.4	8759.8	8140.2	8090.5	7499.1	6592.8
50°	9866.2	9856.0	10391.3	11132.0	11742.6	11776.9	10286.9	9214.9	9105.2	8262.6	7239.1
52.5°	8498.5	8495.9	9375.5	10608.1	12047.2	13067.0	11796.1	10395.2	10211.7	9070.8	7922.3
55°	6539.2	6586.4	7594.7	9051.7	11491.5	13687.7	13151.2	11705.6	11423.9	9884.1	8552.0
57.5°	4632.3	4701.1	5698.0	6995.6	9768.0	13320.7	14067.6	13018.5	12715.1	10694.7	9190.7
60°	2488.2	2549.4	3547.5	5096.3	7267.0	11951.6	14550.8	14158.1	13871.3	11464.7	9766.8
62.5°	1482.5	1502.9	1915.9	3290.0	4915.3	9130.7	14345.5	15026.2	14790.4	12111.0	10267.7
65°	1064.4	1068.2	1276.0	2008.9	2984.1	5547.5	12906.4	15441.7	15369.2	12597.9	10638.7
67.5°	896.2	893.6	980.2	1334.7	2033.2	2778.9	9891.7	14854.1	15162.6	12906.4	10849.0
70°	768.6	772.4	874.4	977.7	1528.4	1573.0	4917.8	12933.1	13590.9	12988.0	10836.3
72.5°	572.4	585.1	679.4	891.0	1153.6	1082.2	1697.9	9589.6	10778.9	12237.2	10274.1
75°	404.1	410.4	478.1	749.5	860.4	787.8	866.8	4957.3	6481.9	9381.8	8409.2
77.5°	311.0	322.5	362.0	523.9	847.7	553.2	530.2	1715.7	2636.1	5667.3	5765.5
80°	168.3	188.7	261.3	378.6	595.3	391.3	262.6	683.3	893.6	2650.1	2223.1
82.5°	86.7	96.9	182.2	272.8	339.1	341.6	130.0	284.2	368.4	818.4	304.6
85°	34.4	42.0	122.4	150.4	174.7	168.3	58.6	114.7	132.5	226.9	93.1
87.5°	7.7	12.7	44.6	34.4	33.1	35.7	14.0	26.8	25.5	26.8	16.6
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°	2286.8	2286.8	2286.8	2286.8	2286.8	2286.8	2286.8	2286.8	2286.8	2286.8	2286.8
2.5°	2300.8	2295.7	2281.8	2266.4	2248.5	2238.4	2232.0	2230.7	2221.8	2215.4	2221.8
5°	2339.0	2334.0	2307.2	2275.4	2241.0	2214.2	2188.7	2165.7	2132.6	2126.2	2123.7
7.5°	2415.5	2401.6	2358.2	2314.9	2249.9	2172.1	2077.8	1969.4	1872.6	1843.3	1829.2
10°	2509.9	2490.8	2435.9	2359.4	2215.4	2003.9	1775.7	1564.0	1395.8	1348.6	1330.8
12.5°	2616.9	2600.4	2527.8	2386.2	2071.4	1687.7	1338.4	1075.8	912.7	871.9	860.4
15°	2744.4	2720.2	2619.5	2345.4	1813.9	1282.4	919.0	763.5	704.9	697.3	689.6
17.5°	2879.5	2840.1	2701.1	2198.8	1467.2	911.4	710.0	665.4	639.9	632.2	628.4
20°	3003.2	2952.2	2749.6	1977.0	1096.2	710.0	636.1	606.8	583.8	574.9	569.8
22.5°	3126.9	3054.2	2749.6	1675.0	822.2	629.7	583.8	557.1	530.2	518.9	512.4
25°	3255.6	3158.7	2701.1	1338.4	661.5	577.5	534.1	504.8	481.9	467.8	462.7
27.5°	3380.6	3246.7	2590.2	1019.8	588.9	531.6	488.2	460.1	438.5	428.3	428.3
30°	3499.0	3333.4	2434.7	773.8	541.7	487.0	446.2	421.9	400.3	390.0	391.3
32.5°	3659.7	3443.0	2268.9	634.8	500.9	444.8	408.0	385.0	365.8	358.2	358.2
35°	3882.7	3604.8	2126.2	623.3	466.6	410.4	373.5	351.8	332.7	326.4	326.4
37.5°	4198.9	3866.2	2051.0	699.8	438.5	379.9	345.4	322.5	304.6	299.5	298.3
40°	4588.9	4220.5	2091.8	776.3	419.3	353.1	319.9	297.0	281.7	275.3	274.1
42.5°	5051.6	4657.8	2317.4	835.0	406.6	330.2	295.7	270.2	260.0	257.5	257.5
45°	5583.2	5138.3	2662.8	897.4	386.2	308.5	271.5	252.4	244.8	243.4	242.2
47.5°	6187.4	5666.1	3063.1	975.2	365.8	288.1	252.4	239.6	233.3	230.7	230.7
50°	6786.5	6197.7	3474.9	1018.4	349.3	269.0	237.1	226.9	221.8	220.5	220.5
52.5°	7413.7	6744.5	3807.6	977.7	335.3	253.7	224.4	216.7	211.6	210.3	210.3
55°	8011.5	7186.8	3864.9	829.8	307.2	238.4	210.3	206.5	200.1	200.1	198.8
57.5°	8526.5	7408.6	3459.6	609.3	279.2	215.5	196.3	192.5	187.4	186.1	184.8
60°	8999.4	7344.8	2670.5	410.4	248.6	192.5	178.5	175.9	170.8	164.4	163.2
62.5°	9265.8	7064.4	1826.7	267.7	218.0	168.3	158.1	156.8	145.3	132.5	130.0
65°	9366.6	6488.2	1139.6	195.1	182.2	144.0	136.4	133.9	117.3	103.2	102.0
67.5°	9278.6	5539.8	574.9	154.3	144.0	119.8	112.1	112.1	100.7	87.9	86.7
70°	8926.7	4153.0	242.2	123.6	110.9	91.7	91.7	96.9	85.4	71.3	70.1
72.5°	8163.2	2794.1	128.7	94.3	82.8	65.0	75.2	79.0	67.5	53.5	53.5
75°	6489.5	1704.3	89.3	70.1	52.3	45.9	57.4	59.9	45.9	35.7	34.4
77.5°	4438.6	979.0	59.9	44.6	33.1	26.8	39.6	37.0	24.2	16.6	17.8
80°	1949.0	408.0	34.4	20.4	12.7	10.1	14.0	10.1	7.7	5.1	5.1
82.5°	228.2	95.6	12.7	7.7	5.1	2.6	1.2	0.0	0.0	0.0	0.0
85°	47.2	11.5	6.4	2.6	1.2	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	8.9	2.6	1.2	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)