

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: P968262

Luminaire Tested: **NAV-SB5B-735-U-T3-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P968262
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-6)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB5B-735-U-T3-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 70 CRI, 3500K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 22866.7 lumens
Efficiency: N/A
Efficacy: 125.2 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B2 - U0 - G3

Input Watts (W): 182.7
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

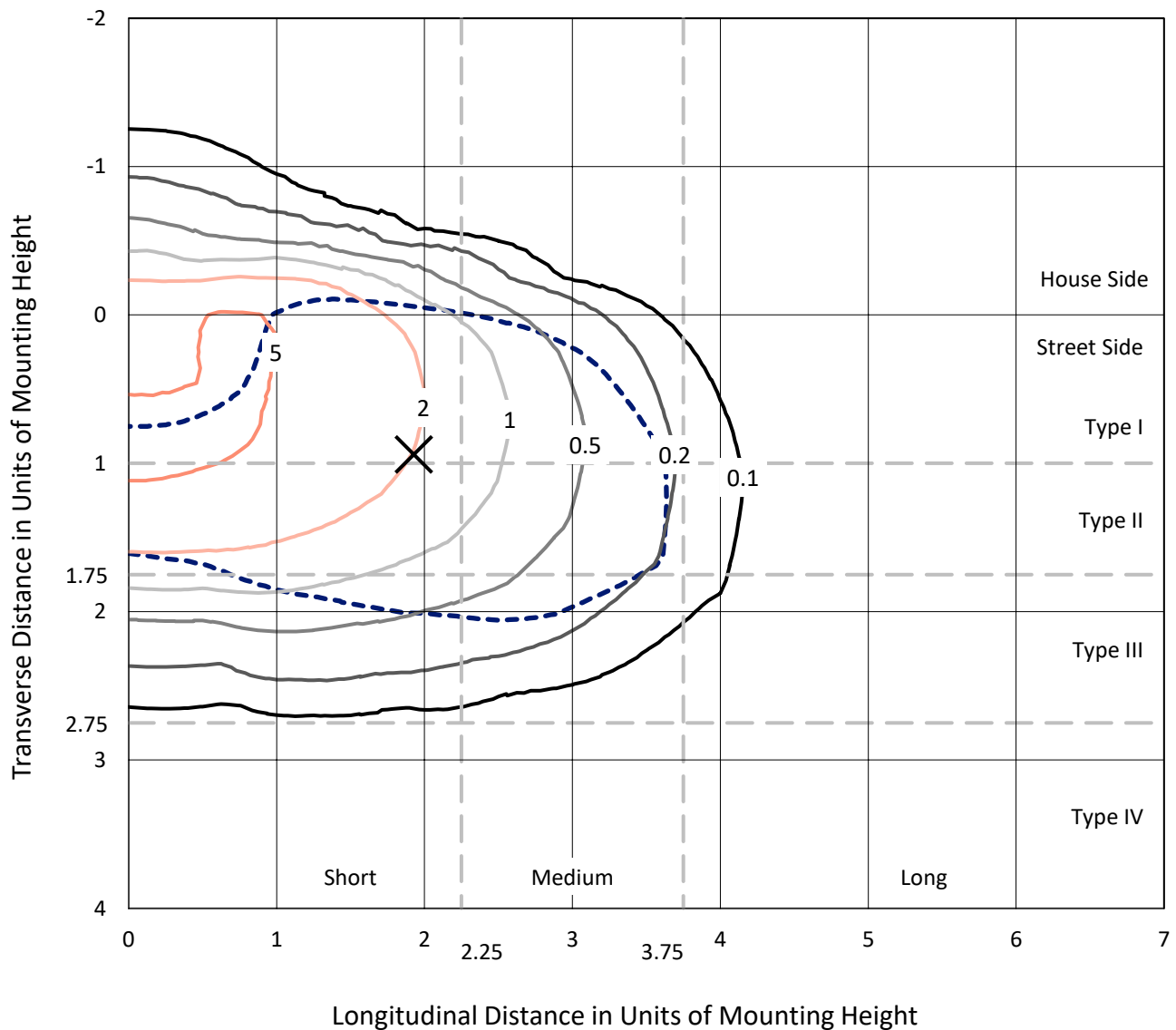


REPORT NUMBER: P968262

CATALOG NUMBER: NAV-SB5B-735-U-T3-HSS

Iso-Footcandle Lines of Horizontal Illumination

× Max cd
- - - 1/2 Max cd

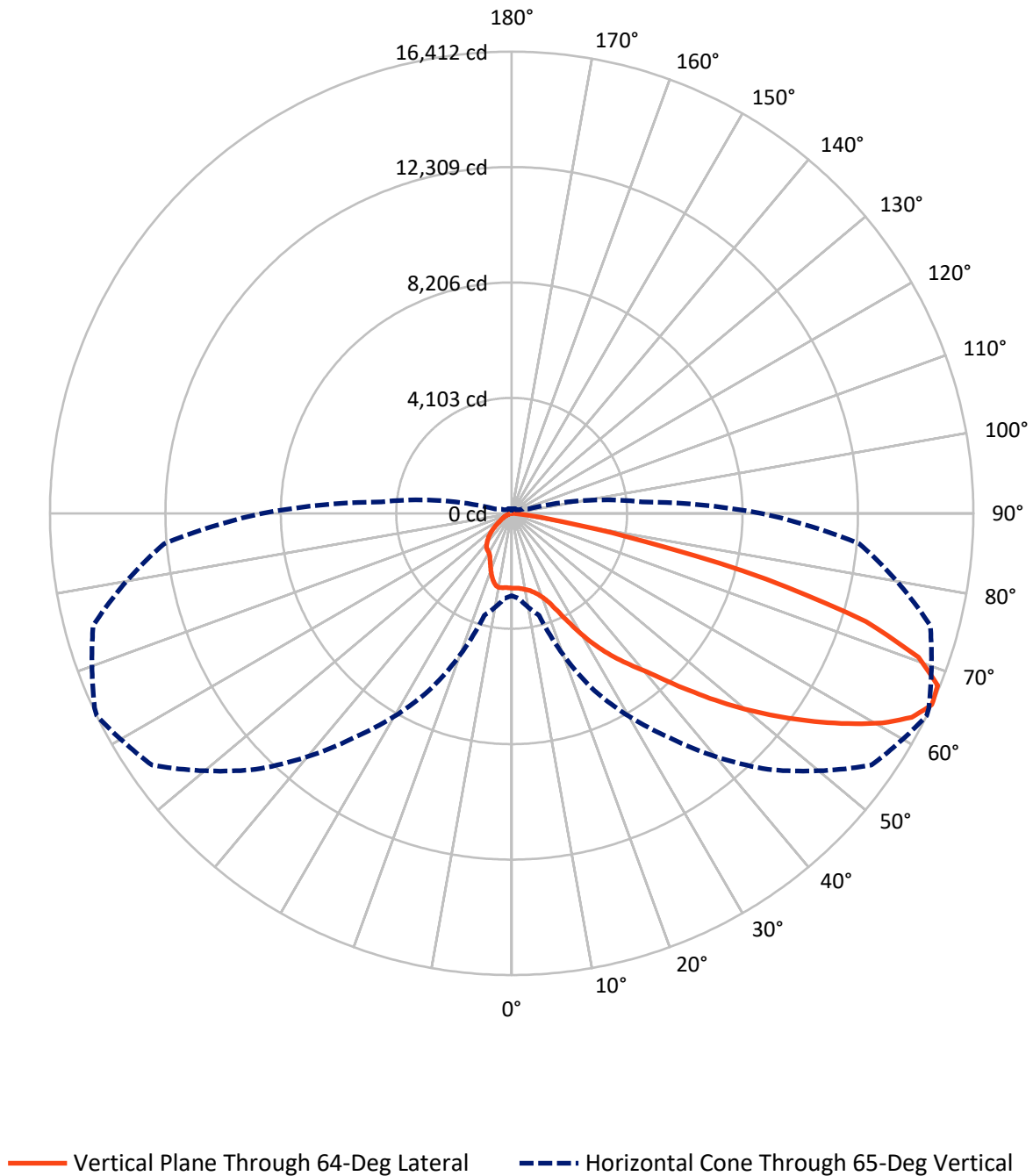


Based on 25 foot mounting height. Maximum calculated value = 6.7 fc
Type III - Short - N/A

REPORT NUMBER: P968262

CATALOG NUMBER: NAV-SB5B-735-U-T3-HSS

Luminous Intensity Polar Plot



REPORT NUMBER: P968262

CATALOG NUMBER: NAV-SB5B-735-U-T3-HSS

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3058.0	0.0	3058.0
	% Fixture	13.4	0.0	13.4
Street Side	Lumens	19808.8	0.0	19808.8
	% Fixture	86.6	0.0	86.6
Total	Lumens	22866.7	0.0	22866.7
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	245.4	1.1
10°-20°	665.5	2.9
20°-30°	1261.1	5.5
30°-40°	2551.9	11.2
40°-50°	4347.2	19.0
50°-60°	5911.9	25.9
60°-70°	5551.6	24.3
70°-80°	2224.2	9.7
80°-90°	107.8	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°	22866.7	100.0
0°-180°	22866.7	100.0

Coefficient of Utilization



REPORT NUMBER: P968262

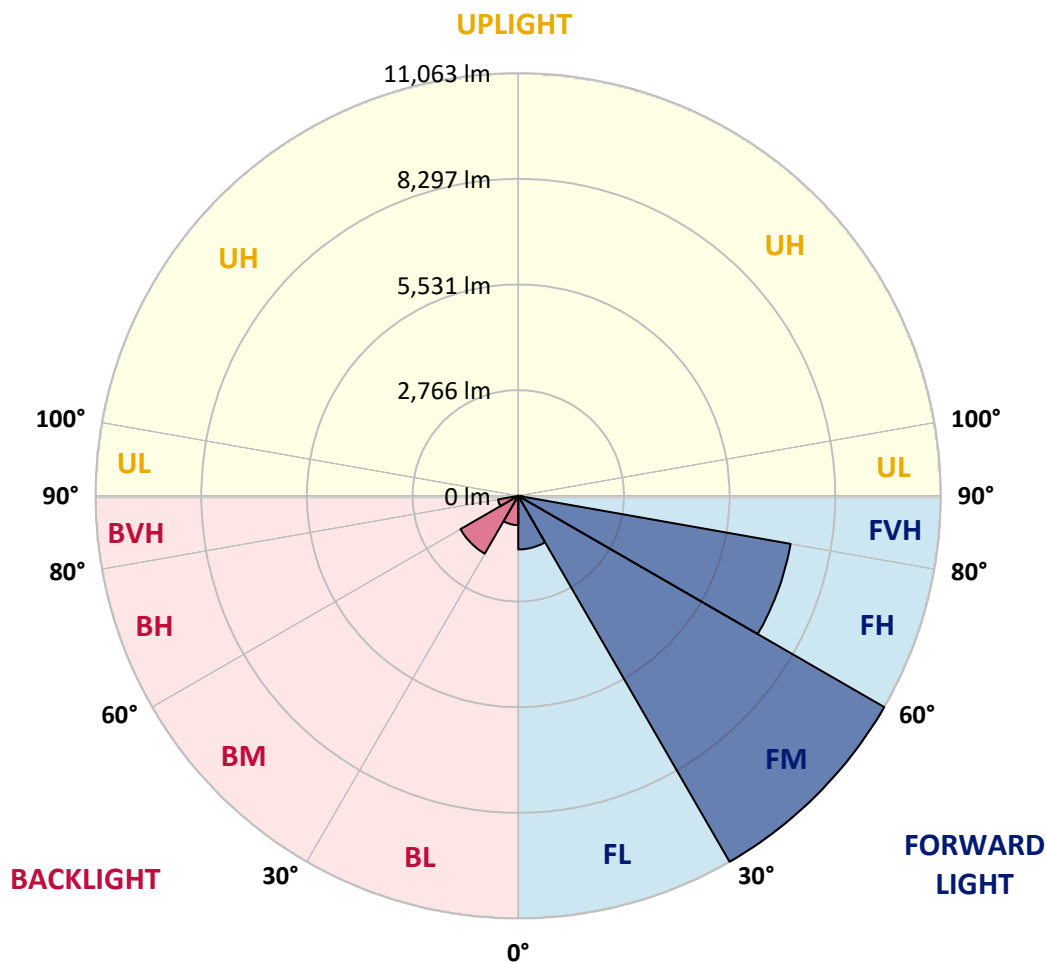
CATALOG NUMBER: NAV-SB5B-735-U-T3-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1404.3	6.1			
FM	(30°-60°)	11062.9	48.4			
FH	(60°-80°)	7239.1	31.7			G3/7500
FVH	(80°-90°)	102.5	0.4			G2/225
BL	(0°-30°)	767.8	3.4	B2/1000		
BM	(30°-60°)	1748.2	7.6	B2/2500		
BH	(60°-80°)	536.7	2.3	B2/1000		G2/1000
BVH	(80°-90°)	5.3	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 Short



REPORT NUMBER: P968262

CATALOG NUMBER: NAV-SB5B-735-U-T3-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	64°	65°	75°	85°
0°	2659.7	2659.7	2659.7	2659.7	2659.7	2659.7	2659.7	2659.7	2659.7	2659.7	2659.7
2.5°	2650.4	2668.8	2664.3	2659.7	2658.1	2661.2	2662.7	2661.2	2661.2	2661.2	2662.7
5°	2599.8	2615.2	2615.2	2625.9	2641.2	2659.7	2673.4	2676.5	2679.6	2684.2	2682.6
7.5°	2503.3	2515.6	2524.8	2560.0	2598.3	2647.4	2688.8	2710.2	2713.3	2730.2	2736.2
10°	2437.3	2452.7	2468.0	2504.8	2560.0	2633.5	2704.1	2756.2	2763.9	2803.7	2822.1
12.5°	2434.3	2449.6	2469.5	2509.4	2573.8	2652.0	2737.8	2812.9	2826.7	2885.0	2923.3
15°	2466.5	2484.9	2503.3	2552.4	2621.3	2716.4	2808.3	2901.9	2915.6	2998.4	3039.8
17.5°	2532.4	2557.0	2570.7	2619.8	2693.4	2799.2	2920.2	3027.5	3039.8	3136.4	3188.5
20°	2662.7	2691.9	2696.5	2736.2	2808.3	2921.8	3065.9	3199.2	3214.6	3324.9	3383.2
22.5°	2932.5	2973.9	2937.1	2957.0	3021.4	3134.9	3291.2	3459.8	3481.3	3607.0	3659.1
25°	3407.7	3465.9	3370.9	3337.2	3364.8	3482.8	3679.0	3892.1	3916.6	4017.8	4043.8
27.5°	4341.3	4266.2	4122.0	3981.0	3898.3	3965.7	4186.4	4450.1	4480.8	4578.9	4548.2
30°	5366.8	5300.9	5106.2	4793.5	4597.2	4586.6	4790.4	5084.7	5120.0	5213.5	5120.0
32.5°	6393.8	6331.0	6119.5	5734.7	5394.4	5225.8	5366.8	5693.3	5711.7	5771.5	5633.5
35°	7404.1	7339.7	7128.2	6734.1	6315.6	5932.5	5904.8	6272.8	6278.8	6341.8	6136.4
37.5°	8420.4	8366.8	8141.4	7755.2	7342.8	6813.9	6557.8	6821.6	6829.2	6890.6	6677.5
40°	9145.5	9168.4	9013.6	8714.8	8360.6	7782.7	7290.6	7405.6	7359.6	7462.3	7335.1
42.5°	9767.8	9813.9	9679.0	9528.7	9323.3	8814.4	8198.2	8178.2	8104.6	8159.8	8028.0
45°	10305.9	10344.2	10223.1	10187.9	10183.3	9826.1	9189.9	9070.3	8967.6	8957.0	8799.0
47.5°	10503.7	10577.3	10629.4	10747.4	10977.3	10827.1	10215.5	10029.9	9915.0	9830.7	9580.8
50°	10578.7	10656.9	10834.8	11178.1	11722.3	11786.7	11236.4	11027.9	10886.9	10733.6	10365.7
52.5°	10477.6	10617.1	10856.2	11434.2	12223.6	12556.2	12215.9	12033.5	11872.6	11622.7	11077.0
55°	9881.3	10020.8	10509.7	11431.1	12473.4	13095.8	13141.8	13060.6	12879.7	12485.7	11651.8
57.5°	8624.2	8831.2	9605.4	11041.7	12468.9	13560.3	14049.4	14107.6	13905.3	13341.1	12104.0
60°	6882.9	7163.4	8107.6	10178.7	12084.1	13811.7	14844.9	15136.2	14921.5	14184.3	12470.4
62.5°	4802.6	5127.7	6021.4	8826.6	11204.2	13630.9	15425.9	15964.0	15801.5	14938.5	12611.4
65°	2929.4	3033.7	3754.2	6945.7	9708.1	12873.6	15605.2	16411.6	16357.9	15399.8	12402.9
67.5°	1951.4	2038.8	2245.8	4762.9	7535.9	11360.6	15176.0	16333.4	16348.7	15324.8	11639.6
70°	1175.8	1250.9	1385.8	2770.0	4883.9	8992.2	13846.9	15337.0	15425.9	14320.7	10192.5
72.5°	484.4	534.9	657.6	1255.5	2529.3	5707.1	11026.3	13167.9	13374.8	12041.2	7822.6
75°	274.4	300.4	386.3	630.1	1097.6	2659.7	6679.0	9347.8	9652.8	8299.3	4706.1
77.5°	182.4	194.6	249.9	407.7	617.8	907.5	2854.3	4870.1	5452.6	4532.9	2037.3
80°	122.6	133.4	171.7	272.9	401.6	389.4	909.1	1804.3	2219.6	1557.5	496.7
82.5°	82.8	84.4	122.6	179.4	254.5	188.6	268.2	561.1	705.2	450.7	188.6
85°	47.6	46.0	90.4	104.2	113.5	78.2	81.3	168.6	220.8	190.0	107.3
87.5°	6.1	9.2	35.3	27.6	15.4	16.9	16.9	29.1	42.9	46.0	23.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

REPORT NUMBER: P968262

CATALOG NUMBER: NAV-SB5B-735-U-T3-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2659.7	2659.7	2659.7	2659.7	2659.7	2659.7	2659.7	2659.7	2659.7	2659.7	2659.7
2.5°	2662.7	2661.2	2656.6	2652.0	2641.2	2635.1	2638.1	2635.1	2633.5	2635.1	2641.2
5°	2682.6	2678.0	2665.8	2650.4	2629.0	2602.9	2586.1	2561.6	2538.5	2524.8	2527.9
7.5°	2736.2	2731.7	2714.8	2671.9	2602.9	2494.0	2394.4	2307.1	2241.2	2202.8	2204.4
10°	2822.1	2814.4	2788.4	2693.4	2512.5	2274.9	2077.2	1913.1	1805.8	1755.2	1750.6
12.5°	2923.3	2914.1	2868.2	2673.4	2340.8	1969.8	1697.0	1514.5	1414.9	1370.4	1365.8
15°	3042.9	3030.6	2940.2	2578.4	2090.9	1632.6	1382.7	1246.3	1181.9	1142.1	1143.6
17.5°	3191.5	3170.1	2993.8	2435.8	1819.6	1375.0	1189.5	1086.8	1030.1	991.8	988.7
20°	3384.8	3349.5	3036.8	2265.7	1569.7	1212.6	1059.2	973.4	930.5	896.8	890.6
22.5°	3654.5	3603.9	3088.8	2081.7	1393.4	1100.6	962.7	899.8	864.6	826.3	820.1
25°	3988.7	3928.9	3153.2	1911.5	1272.3	1004.1	892.2	840.1	798.7	754.2	749.6
27.5°	4456.2	4349.0	3229.9	1772.0	1168.1	921.3	827.8	769.6	722.0	685.2	677.5
30°	4977.4	4801.1	3297.3	1687.8	1073.1	844.6	743.4	685.2	640.7	614.7	610.1
32.5°	5471.0	5231.9	3341.8	1651.0	987.2	757.3	651.5	588.7	554.9	547.2	551.9
35°	5937.0	5621.3	3337.2	1615.7	910.6	669.9	561.1	496.7	470.6	475.2	475.2
37.5°	6473.6	6036.7	3305.0	1560.6	847.7	590.2	482.9	426.2	403.1	404.7	410.8
40°	7097.5	6516.5	3285.1	1456.3	778.7	516.6	418.5	372.5	355.7	349.5	348.0
42.5°	7762.7	6981.0	3288.1	1338.2	692.9	450.7	374.0	335.7	320.4	315.8	314.3
45°	8431.1	7424.0	3292.7	1215.6	602.4	400.1	341.8	309.7	300.4	294.3	294.3
47.5°	9059.7	7801.1	3206.9	1083.7	513.5	361.7	315.8	294.3	286.7	279.0	279.0
50°	9645.2	8052.5	3000.0	930.5	443.0	331.1	295.8	280.5	272.9	265.2	265.2
52.5°	10100.5	8092.4	2658.1	772.6	394.0	308.1	283.6	269.8	260.6	253.0	251.4
55°	10302.8	7842.5	2172.2	625.5	355.7	288.2	271.3	257.6	246.8	239.1	237.6
57.5°	10250.7	7316.7	1693.9	502.8	318.9	268.2	256.0	246.8	234.5	222.3	220.8
60°	9994.7	6613.1	1276.9	418.5	285.2	246.8	239.1	231.4	214.6	196.2	193.1
62.5°	9551.7	5728.5	910.6	346.4	248.4	222.3	219.2	213.1	188.6	154.8	151.8
65°	8874.1	4654.0	613.2	288.2	213.1	194.6	196.2	185.5	153.3	115.0	111.9
67.5°	7883.9	3403.1	392.5	236.1	177.8	162.5	164.0	157.8	130.3	98.1	93.5
70°	6622.2	2253.4	256.0	179.4	142.6	125.7	134.9	136.4	110.4	79.7	76.7
72.5°	4854.8	1330.6	179.4	133.4	104.2	87.3	110.4	113.5	88.9	59.8	56.7
75°	2767.0	631.6	134.9	96.6	64.4	61.3	85.9	85.9	61.3	39.9	36.8
77.5°	1161.9	263.6	95.0	62.8	36.8	35.3	58.2	53.6	30.6	18.3	18.3
80°	335.7	118.1	50.6	30.6	15.4	13.8	23.0	16.9	7.7	3.1	3.1
82.5°	131.8	52.1	19.9	12.3	6.1	6.1	3.1	0.0	0.0	0.0	0.0
85°	78.2	21.4	9.2	4.6	1.5	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	19.9	4.6	3.1	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)