

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: P968389

Luminaire Tested: **NAV-SB5B-827-U-T3**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P968389
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-5)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB5B-827-U-T3
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 80 CRI, 2700K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III
OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 25369.8 lumens
Efficiency: N/A
Efficacy: 138.9 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B3 - U0 - G3

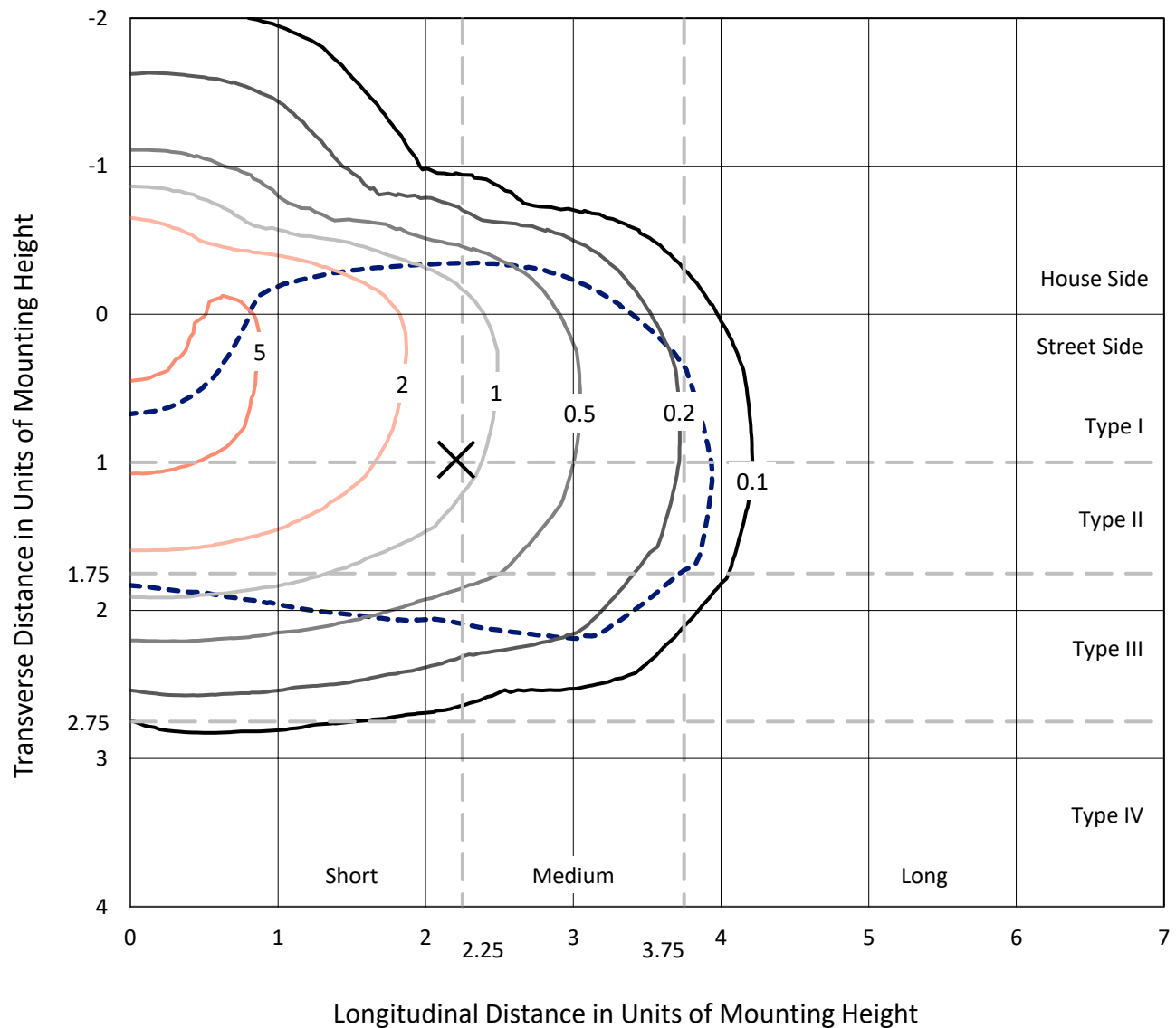
Input Watts (W): 182.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P968389
CATALOG NUMBER: NAV-SB5B-827-U-T3

Iso-Footcandle Lines of Horizontal Illumination

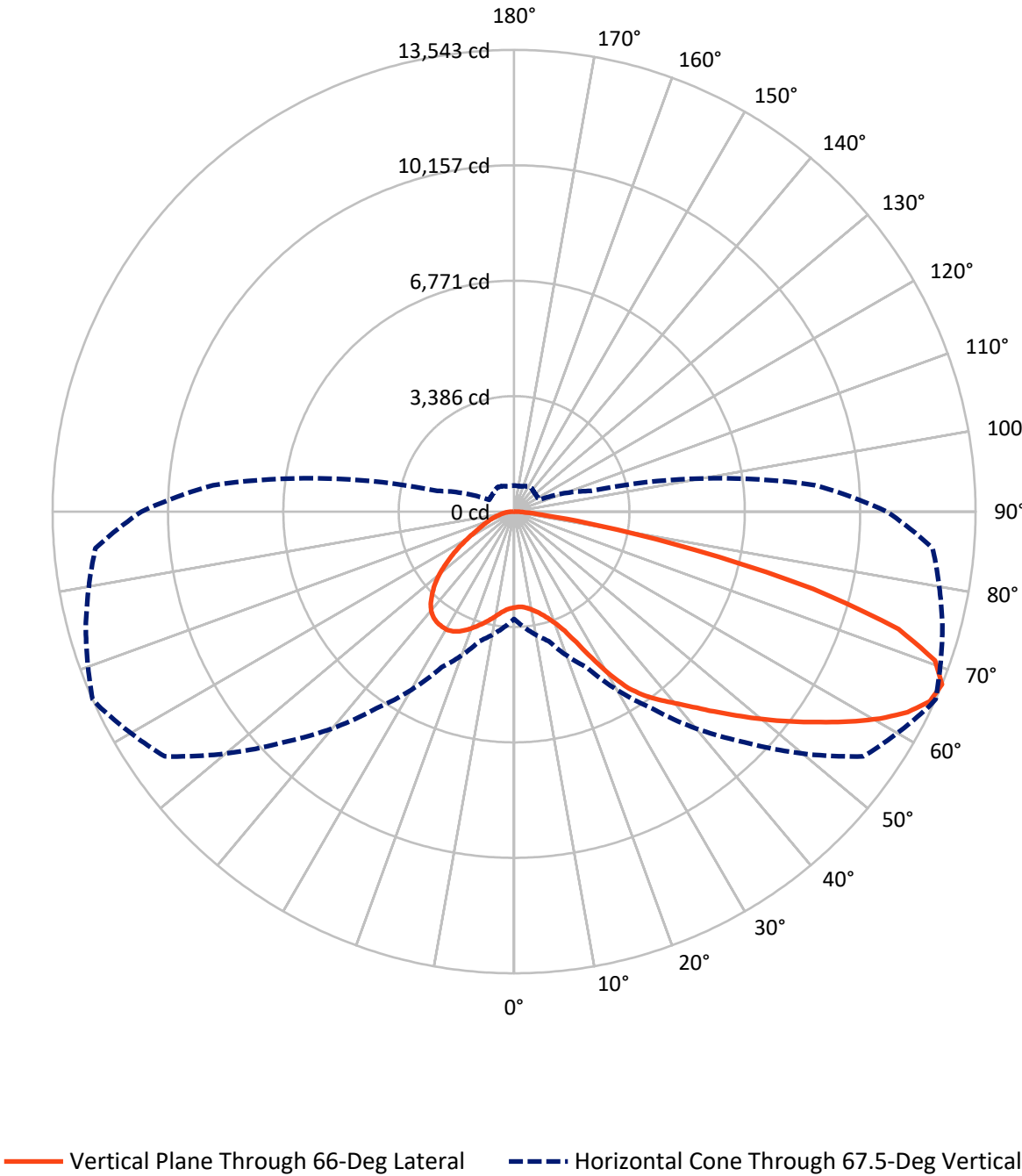
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.4 fc
Type III - Short - N/A

REPORT NUMBER: P968389
CATALOG NUMBER: NAV-SB5B-827-U-T3

Luminous Intensity Polar Plot



REPORT NUMBER: P968389

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6308.1	0.0	6308.1
	% Fixture	24.9	0.0	24.9
Street Side	Lumens	19061.6	0.0	19061.6
	% Fixture	75.1	0.0	75.1
Total	Lumens	25369.8	0.0	25369.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	279.0	1.1
10°-20°	921.7	3.6
20°-30°	1776.6	7.0
30°-40°	3115.0	12.3
40°-50°	4630.9	18.3
50°-60°	5870.2	23.1
60°-70°	5743.8	22.6
70°-80°	2739.8	10.8
80°-90°	292.8	1.2
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°	25369.8	100.0
0°-180°	25369.8	100.0

Coefficient of Utilization



REPORT NUMBER: P968389

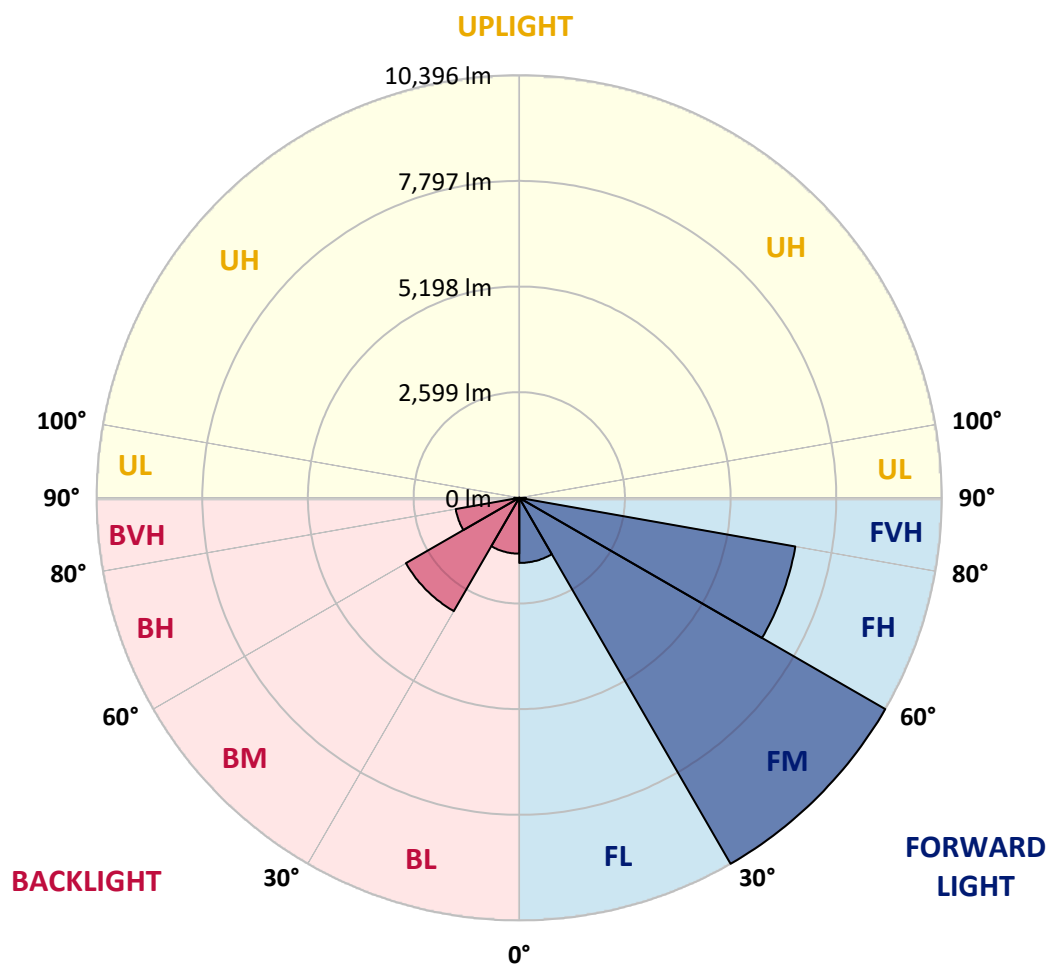
CATALOG NUMBER: NAV-SB5B-827-U-T3

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1603.1	6.3			
FM	(30°-60°)	10396.3	41.0			
FH	(60°-80°)	6896.2	27.2			G3/7500
FVH	(80°-90°)	166.0	0.7			G2/225
BL	(0°-30°)	1374.1	5.4	B3/2500		
BM	(30°-60°)	3219.7	12.7	B3/5000		
BH	(60°-80°)	1587.4	6.3	B3/2500		G3/2500
BVH	(80°-90°)	126.8	0.5			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3

Type III Short



REPORT NUMBER: P968389

CATALOG NUMBER: NAV-SB5B-827-U-T3

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	2813.8	2813.8	2813.8	2813.8	2813.8	2813.8	2813.8	2813.8	2813.8	2813.8	2813.8
2.5°	2784.5	2800.5	2796.5	2789.8	2788.5	2791.2	2795.2	2799.2	2797.8	2804.5	2815.2
5°	2776.5	2792.5	2791.2	2791.2	2796.5	2807.2	2813.8	2820.5	2813.8	2821.8	2836.5
7.5°	2781.8	2793.8	2799.2	2804.5	2817.8	2837.8	2853.8	2868.5	2860.5	2869.8	2888.4
10°	2849.8	2859.1	2864.5	2864.5	2873.8	2896.4	2912.4	2939.2	2932.5	2947.2	2971.2
12.5°	2973.8	2983.2	2983.2	2977.8	2984.5	2999.1	3004.5	3033.8	3021.8	3045.8	3069.8
15°	3125.7	3144.4	3129.7	3120.4	3123.1	3137.7	3136.4	3159.0	3147.1	3167.0	3188.4
17.5°	3293.7	3317.7	3293.7	3292.4	3287.1	3303.1	3304.4	3324.4	3303.1	3317.7	3332.4
20°	3492.3	3525.6	3505.6	3512.3	3500.3	3506.9	3513.6	3542.9	3509.6	3520.3	3516.3
22.5°	3772.2	3812.2	3790.9	3816.2	3808.2	3802.9	3801.5	3853.6	3801.5	3805.5	3766.9
25°	4180.2	4228.1	4190.8	4225.5	4225.5	4242.8	4262.8	4329.4	4242.8	4217.5	4117.4
27.5°	4782.6	4830.6	4757.2	4778.7	4771.9	4814.6	4793.3	4958.5	4865.3	4824.0	4622.6
30°	5507.7	5593.0	5454.4	5449.1	5442.4	5510.4	5541.0	5650.3	5555.7	5514.4	5271.8
32.5°	6291.4	6380.8	6215.5	6167.5	6142.2	6183.5	6158.2	6246.1	6180.9	6116.9	5817.0
35°	7120.6	7208.5	7051.3	6958.0	6856.6	6770.0	6679.4	6702.1	6640.8	6543.4	6232.8
37.5°	7904.4	8065.6	7899.1	7799.0	7612.5	7443.1	7189.9	7084.6	7027.3	6938.0	6624.7
40°	8702.8	8794.8	8668.1	8582.8	8380.2	8114.9	7709.7	7487.1	7409.8	7323.2	7057.9
42.5°	9290.6	9378.5	9310.6	9252.0	9093.4	8785.5	8261.6	7983.0	7871.1	7773.7	7548.4
45°	9757.2	9822.5	9779.8	9801.2	9733.2	9434.6	8833.4	8514.9	8398.8	8280.3	8102.9
47.5°	9945.1	10014.4	10082.4	10209.0	10325.0	10105.1	9447.9	9090.6	8968.0	8846.8	8672.1
50°	9923.7	9994.4	10191.7	10460.9	10820.8	10747.5	10095.7	9703.8	9590.5	9451.9	9290.6
52.5°	9753.2	9833.1	10086.4	10534.2	11107.4	11228.7	10755.5	10337.0	10230.3	10065.1	9903.8
55°	9305.3	9353.2	9733.2	10367.7	11175.4	11564.7	11402.0	11011.5	10904.8	10674.2	10498.3
57.5°	8474.8	8544.2	9097.4	9918.4	11004.8	11792.5	11969.8	11720.6	11618.0	11286.1	11102.1
60°	7391.2	7501.8	8134.9	9164.0	10570.2	11791.2	12485.7	12417.7	12332.4	11888.6	11696.6
62.5°	6164.9	6292.8	6901.9	8097.6	9810.5	11456.6	12808.3	13001.5	12957.5	12444.3	12199.1
65°	4734.6	4822.6	5429.1	6718.1	8628.1	10738.2	12845.6	13400.0	13408.1	12866.9	12461.6
67.5°	3152.4	3405.7	3932.2	5041.2	7044.6	9563.9	12517.7	13465.4	13542.7	13012.2	12329.7
70°	1538.2	1871.4	2387.3	3276.4	5041.2	7763.0	11660.6	12929.6	13101.6	12588.3	11543.2
72.5°	638.5	746.4	1027.7	1616.8	2893.8	5238.5	9938.4	11476.6	11795.2	11154.0	9705.1
75°	430.5	466.6	587.8	829.1	1318.3	2583.2	7167.2	8557.5	9070.6	8424.2	6886.0
77.5°	331.9	354.5	427.8	579.8	783.8	977.0	3836.2	5157.2	5422.5	5019.8	3583.0
80°	261.3	278.6	319.9	422.5	555.9	522.5	1307.6	2336.7	2489.9	2088.7	1151.7
82.5°	226.6	233.3	229.3	286.6	369.2	305.2	429.2	862.4	951.7	690.4	375.9
85°	164.0	182.7	190.6	177.3	196.0	154.7	176.0	305.2	335.9	299.9	212.0
87.5°	66.6	98.6	121.3	114.6	72.0	44.0	54.6	89.3	102.6	111.9	69.3
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: P968389

CATALOG NUMBER: NAV-SB5B-827-U-T3

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2813.8	2813.8	2813.8	2813.8	2813.8	2813.8	2813.8	2813.8	2813.8	2813.8	2813.8
2.5°	2816.5	2825.8	2832.5	2840.5	2845.8	2853.8	2869.8	2879.1	2880.5	2887.1	2885.8
5°	2841.8	2855.1	2869.8	2891.1	2915.1	2935.2	2965.8	2987.2	2995.2	3001.8	3000.5
7.5°	2896.4	2915.1	2941.9	2979.2	3013.8	3040.5	3077.8	3103.1	3128.4	3137.7	3139.1
10°	2977.8	3004.5	3043.1	3093.8	3131.1	3165.7	3204.4	3225.7	3251.1	3261.8	3267.1
12.5°	3079.1	3107.1	3157.7	3228.3	3263.1	3287.1	3300.4	3295.1	3300.4	3309.7	3312.4
15°	3195.0	3225.7	3283.1	3359.0	3383.0	3361.7	3332.4	3305.7	3301.7	3304.4	3313.7
17.5°	3332.4	3355.0	3421.7	3485.6	3468.3	3380.3	3316.4	3273.7	3252.4	3245.8	3255.1
20°	3524.3	3524.3	3579.0	3619.0	3502.9	3353.7	3253.8	3184.4	3140.4	3121.7	3117.7
22.5°	3757.5	3736.2	3770.9	3742.9	3496.3	3279.1	3140.4	3020.5	2953.8	2927.1	2923.1
25°	4053.5	4028.1	4018.8	3845.5	3448.3	3160.4	2935.2	2789.8	2731.2	2716.6	2719.2
27.5°	4500.1	4436.0	4314.7	3901.6	3360.4	2973.8	2695.2	2560.6	2527.2	2528.6	2532.6
30°	5094.6	4966.5	4669.3	3910.9	3216.3	2709.9	2450.0	2354.0	2338.0	2344.7	2367.3
32.5°	5645.0	5523.7	5031.8	3868.2	2995.2	2451.3	2230.0	2166.0	2142.0	2150.0	2160.7
35°	6076.9	6043.6	5367.7	3808.2	2723.2	2208.7	2032.8	1978.0	1931.4	1920.7	1928.7
37.5°	6484.8	6471.4	5619.7	3724.2	2454.0	2036.8	1874.1	1802.2	1734.2	1696.9	1698.2
40°	6932.6	6919.3	5785.0	3595.0	2215.3	1887.4	1731.5	1636.8	1552.9	1484.9	1491.6
42.5°	7436.5	7357.9	5863.6	3409.7	2012.8	1760.8	1615.5	1487.6	1376.9	1314.3	1318.3
45°	7987.0	7809.7	5862.3	3173.7	1842.1	1644.8	1491.6	1310.3	1207.7	1149.0	1146.4
47.5°	8570.8	8241.6	5790.3	2912.4	1676.8	1516.9	1299.6	1161.0	1093.1	1057.0	1049.0
50°	9173.3	8645.5	5667.6	2612.5	1507.6	1371.6	1179.7	1085.1	1033.0	999.7	987.7
52.5°	9739.9	9012.0	5519.7	2272.6	1335.6	1230.3	1126.4	1053.0	998.4	961.0	945.0
55°	10266.3	9327.9	5310.4	1924.7	1195.7	1135.7	1101.1	1039.7	977.0	933.1	915.7
57.5°	10734.2	9533.2	4949.2	1598.2	1095.7	1070.3	1074.3	1017.0	945.0	907.7	883.8
60°	11123.4	9683.8	4414.7	1295.6	1014.3	1006.3	1033.0	974.4	890.4	847.8	829.1
62.5°	11356.7	9681.1	3758.9	1061.0	945.0	947.7	978.4	921.1	835.8	795.8	783.8
65°	11336.7	9443.9	3039.1	907.7	878.4	881.1	921.1	862.4	790.5	766.4	765.1
67.5°	10935.4	8865.4	2331.4	807.8	805.1	817.1	863.8	822.5	762.4	759.7	763.7
70°	9849.1	7664.4	1679.5	727.7	729.1	746.4	807.8	797.1	747.7	753.1	751.7
72.5°	7897.7	5843.6	1127.7	643.8	645.1	673.1	754.4	777.2	733.1	803.8	814.5
75°	5259.8	3644.3	725.1	554.5	555.9	591.8	707.8	738.4	693.1	801.1	807.8
77.5°	2527.2	1638.2	525.2	466.6	466.6	499.9	611.8	661.1	590.5	622.5	570.5
80°	873.1	615.8	413.2	375.9	367.9	390.5	515.9	573.2	509.2	469.2	439.8
82.5°	343.9	319.9	331.9	291.9	265.3	279.9	401.2	473.2	374.5	338.6	337.2
85°	197.3	208.0	234.6	193.3	153.2	172.0	294.6	339.9	282.6	249.3	254.6
87.5°	53.3	73.3	107.9	99.9	69.3	73.3	139.9	188.0	162.7	125.3	129.3
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)