

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: P964218

Luminaire Tested: **NAV-SB3B-835-U-SL3**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P964218
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-12)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB3B-835-U-SL3
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 80 CRI, 3500K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III
SPILL LIGHT ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 15698.9 lumens
Efficiency: N/A
Efficacy: 143.8 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type IV - Medium
BUG Rating: B2 - U0 - G3

Input Watts (W): 109.2
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

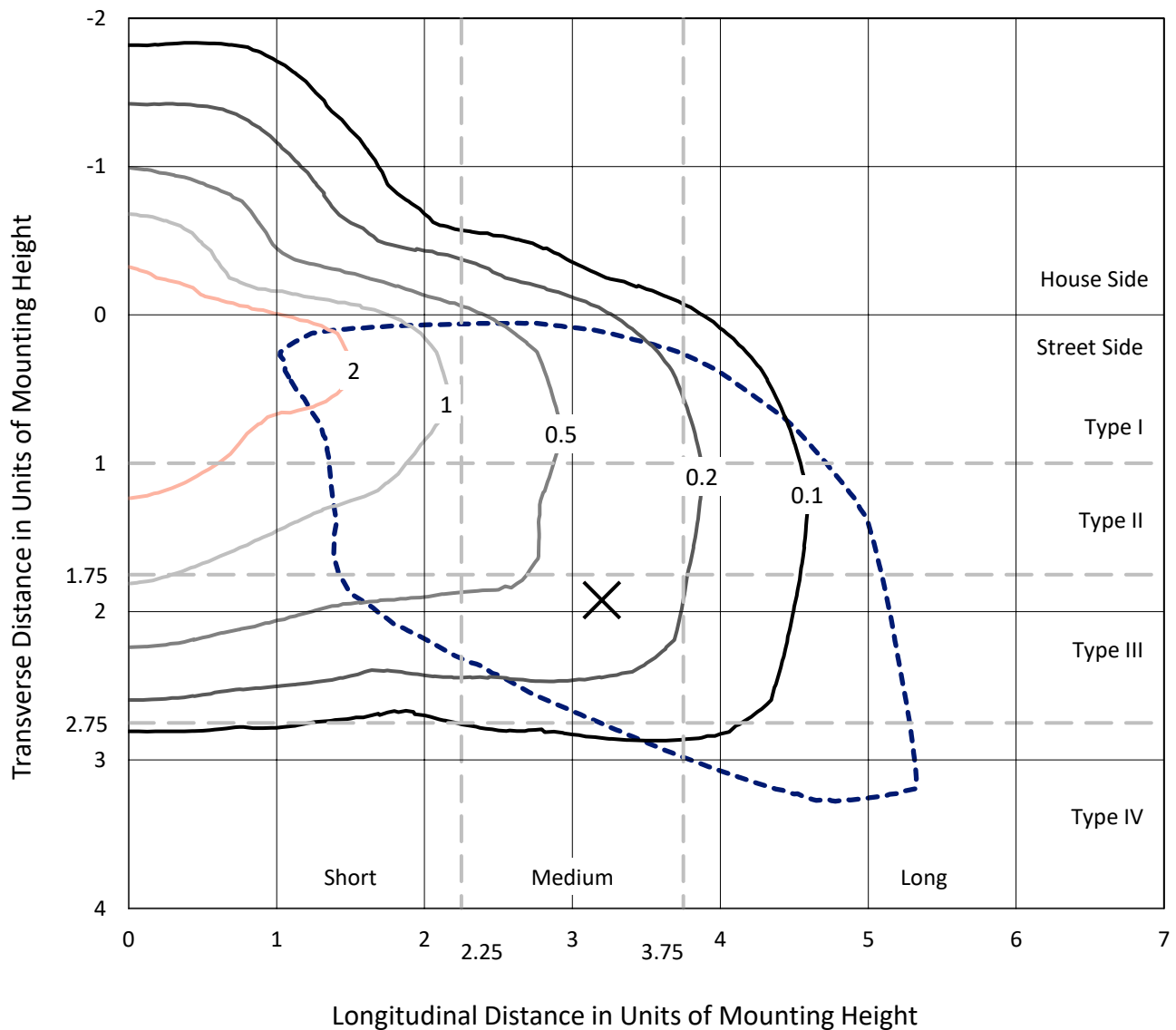


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Iso-Footcandle Lines of Horizontal Illumination

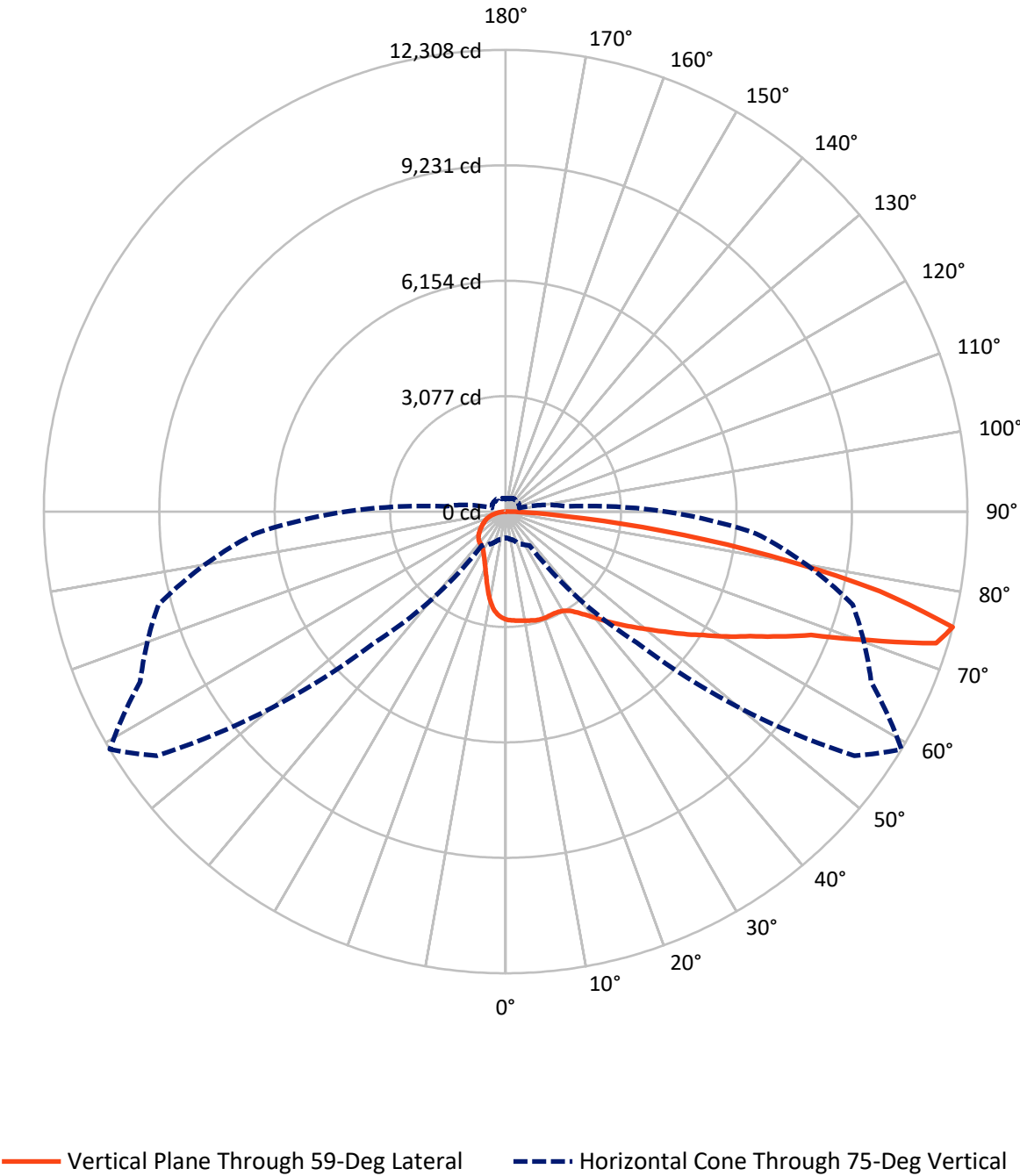
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.6 fc
Type IV - Medium - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2944.4	0.0	2944.4
	% Fixture	18.8	0.0	18.8
Street Side	Lumens	12754.5	0.0	12754.5
	% Fixture	81.2	0.0	81.2
Total	Lumens	15698.9	0.0	15698.9
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	258.4	1.6
10°-20°	660.4	4.2
20°-30°	1003.1	6.4
30°-40°	1491.1	9.5
40°-50°	2217.5	14.1
50°-60°	3010.1	19.2
60°-70°	3674.8	23.4
70°-80°	2883.9	18.4
80°-90°	499.6	3.2
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°	15698.9	100.0
0°-180°	15698.9	100.0

Coefficient of Utilization



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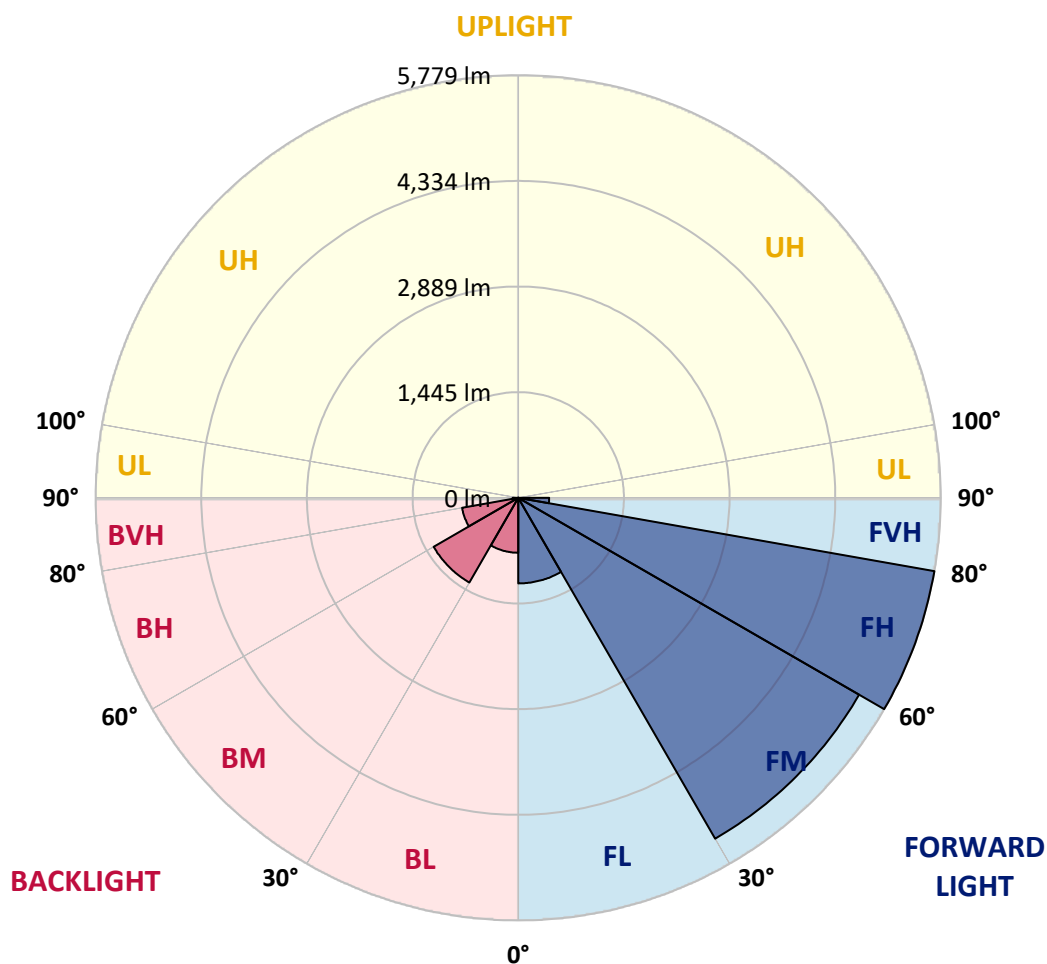
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1170.5	7.5			
FM	(30°-60°)	5382.2	34.3			
FH	(60°-80°)	5778.6	36.8			G3/7500
FVH	(80°-90°)	423.1	2.7			G3/500
BL	(0°-30°)	751.4	4.8	B2/1000		
BM	(30°-60°)	1336.5	8.5	B2/2500		
BH	(60°-80°)	780.1	5.0	B2/1000		G2/1000
BVH	(80°-90°)	76.5	0.5			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G3

Type IV Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	59°	65°	75°	85°
0°	2881.5	2881.5	2881.5	2881.5	2881.5	2881.5	2881.5	2881.5	2881.5	2881.5	2881.5
2.5°	2906.0	2895.8	2906.0	2901.8	2900.0	2896.6	2897.6	2903.4	2900.0	2904.3	2890.0
5°	2886.6	2880.7	2890.8	2888.2	2899.2	2901.0	2911.9	2918.7	2922.9	2923.7	2912.7
7.5°	2854.5	2848.6	2862.9	2874.7	2898.4	2905.2	2927.9	2938.9	2944.8	2955.0	2938.9
10°	2737.1	2734.6	2770.1	2814.8	2870.5	2905.2	2939.8	2958.4	2967.7	2994.6	2976.1
12.5°	2529.3	2532.7	2579.2	2665.3	2776.8	2888.2	2953.3	2980.3	2994.6	3028.5	3020.0
15°	2330.8	2330.0	2380.7	2472.7	2629.0	2813.9	2960.0	3006.5	3031.0	3080.8	3074.1
17.5°	2216.0	2212.7	2248.1	2318.2	2463.5	2700.0	2943.2	3020.9	3073.2	3135.7	3129.8
20°	2194.9	2188.2	2206.7	2241.4	2344.4	2574.9	2899.2	3020.9	3107.0	3188.1	3184.7
22.5°	2271.7	2260.7	2253.2	2249.0	2294.6	2471.9	2849.4	3010.7	3156.8	3263.2	3257.3
25°	2426.3	2409.4	2370.5	2332.6	2319.1	2425.5	2805.5	3008.2	3231.1	3364.6	3342.6
27.5°	2676.3	2655.2	2576.6	2485.4	2403.5	2449.1	2786.1	3023.3	3313.0	3471.8	3427.9
30°	2986.2	2963.4	2864.6	2724.4	2577.5	2537.0	2810.5	3068.1	3417.8	3614.6	3528.4
32.5°	3264.1	3238.7	3154.2	3011.6	2813.1	2689.0	2888.2	3153.4	3582.5	3813.0	3679.5
35°	3510.6	3481.1	3405.0	3273.3	3102.0	2902.6	3028.5	3304.6	3816.4	4135.6	3884.7
37.5°	3752.2	3717.6	3634.9	3495.5	3375.5	3187.2	3221.9	3498.8	4127.2	4527.4	4156.7
40°	4022.4	3972.6	3872.1	3734.5	3617.9	3520.8	3476.1	3736.9	4443.0	4964.9	4496.3
42.5°	4284.3	4236.9	4117.0	3999.7	3853.6	3825.7	3770.8	4015.6	4788.4	5445.4	4840.8
45°	4566.3	4509.7	4364.4	4215.8	4123.8	4028.4	4056.2	4294.3	5127.0	5935.3	5202.3
47.5°	4830.6	4767.3	4595.9	4430.4	4379.7	4198.9	4318.0	4600.9	5479.2	6431.9	5560.3
50°	4973.4	4910.9	4768.2	4618.6	4579.0	4409.2	4601.7	4937.9	5848.3	6926.7	5904.0
52.5°	5092.4	5024.9	4838.2	4755.5	4743.7	4638.1	4951.4	5323.0	6217.3	7364.2	6235.9
55°	5219.1	5144.0	4905.9	4831.5	4885.6	4894.8	5366.1	5759.6	6607.6	7790.7	6549.2
57.5°	5365.3	5269.8	4970.8	4895.7	5024.0	5195.5	5842.4	6212.3	6990.9	8186.0	6827.9
60°	5502.9	5406.6	5095.8	4997.9	5173.5	5544.2	6388.8	6760.4	7425.0	8538.0	7091.5
62.5°	5529.9	5450.5	5195.5	5194.6	5376.2	5951.4	7035.7	7313.6	7804.2	8886.0	7327.9
65°	5062.1	5012.2	4861.1	5187.0	5666.7	6537.4	7756.1	8021.2	8286.4	9190.0	7535.6
67.5°	3852.7	3859.4	3848.5	4477.6	5432.0	7379.4	8799.0	8778.8	8881.8	9531.3	7774.6
70°	1761.7	1801.3	2059.7	3091.0	4351.8	7476.6	10523.6	10260.9	9629.2	9972.9	7981.6
72.5°	951.8	982.2	1087.7	1497.3	2616.3	6647.2	11812.3	11999.0	10623.2	10270.2	7754.3
75°	698.4	715.3	788.7	951.8	1098.7	4940.4	11350.3	12308.0	10747.3	9576.9	6696.2
77.5°	522.8	530.3	590.3	754.2	562.4	2604.5	9069.3	10193.3	9200.2	7868.4	4946.3
80°	379.1	387.7	432.3	565.8	394.4	952.6	6227.5	7154.8	6301.0	5015.6	2465.1
82.5°	261.8	265.2	284.6	385.1	275.3	369.9	3533.5	4195.5	3517.4	1760.0	665.4
85°	158.0	162.2	170.6	224.7	156.2	175.7	1525.2	1577.6	1051.4	420.6	206.9
87.5°	65.0	69.3	76.1	94.6	61.6	49.0	251.6	315.8	196.8	123.3	64.2
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°	2881.5	2881.5	2881.5	2881.5	2881.5	2881.5	2881.5	2881.5	2881.5	2881.5	2881.5
2.5°	2885.7	2879.8	2863.7	2841.8	2821.5	2796.2	2785.2	2775.9	2767.5	2751.4	2743.8
5°	2903.4	2887.4	2844.4	2788.6	2725.3	2656.0	2588.4	2542.0	2502.3	2472.7	2448.2
7.5°	2930.5	2900.0	2821.5	2707.5	2562.3	2413.7	2279.4	2184.0	2112.1	2086.0	2040.4
10°	2958.4	2922.1	2785.2	2584.2	2333.4	2104.5	1926.4	1828.4	1771.0	1752.3	1723.6
12.5°	2991.3	2938.1	2728.7	2412.7	2077.5	1826.7	1671.3	1613.9	1584.3	1574.2	1576.8
15°	3039.4	2951.6	2643.4	2198.3	1833.4	1624.0	1523.6	1483.8	1468.6	1467.8	1471.2
17.5°	3075.7	2954.2	2510.7	1968.6	1645.9	1501.5	1418.8	1403.6	1413.7	1429.0	1434.8
20°	3116.3	2931.3	2336.8	1759.1	1514.2	1394.3	1359.7	1369.8	1394.3	1416.2	1423.8
22.5°	3145.0	2890.0	2126.5	1596.1	1400.3	1332.6	1331.0	1352.1	1365.6	1376.6	1382.5
25°	3170.3	2819.9	1903.5	1459.3	1306.5	1295.5	1314.0	1307.3	1298.1	1307.3	1313.2
27.5°	3188.9	2709.2	1704.3	1339.4	1240.6	1270.2	1259.2	1243.9	1243.1	1248.2	1256.6
30°	3183.0	2561.5	1540.4	1225.4	1194.1	1222.8	1196.7	1194.1	1191.7	1194.1	1203.5
32.5°	3183.0	2393.4	1414.6	1146.9	1164.6	1153.6	1151.1	1145.1	1135.0	1134.2	1145.1
35°	3200.8	2225.3	1306.5	1104.6	1140.1	1114.0	1115.6	1101.3	1080.1	1070.0	1080.1
37.5°	3237.1	2090.2	1199.2	1084.3	1097.1	1096.1	1089.5	1065.0	1027.8	995.7	1006.7
40°	3324.9	2050.5	1125.8	1075.1	1076.8	1086.9	1069.2	1021.8	937.5	885.1	891.9
42.5°	3462.6	2117.2	1109.7	1052.3	1063.2	1073.4	1038.7	929.0	869.0	837.7	837.7
45°	3637.3	2233.8	1144.3	1019.4	1031.1	1048.9	945.9	893.5	866.4	867.4	871.6
47.5°	3858.6	2356.2	1208.5	990.7	984.7	994.9	884.2	852.1	815.0	824.2	847.9
50°	4114.5	2480.4	1269.4	951.8	933.2	900.3	844.5	814.2	766.8	744.9	750.8
52.5°	4391.5	2600.3	1293.8	904.5	877.5	839.5	817.5	780.3	722.9	686.5	685.7
55°	4654.1	2709.2	1266.8	847.9	821.7	792.1	788.7	766.0	704.3	653.6	653.6
57.5°	4902.5	2800.4	1199.2	790.5	765.2	747.4	770.2	759.2	681.5	616.5	613.2
60°	5112.7	2862.9	1101.3	732.2	714.4	705.2	739.8	736.5	649.4	576.8	574.3
62.5°	5280.0	2887.4	993.1	676.5	672.2	655.4	697.6	697.6	608.8	537.9	535.5
65°	5410.9	2863.7	883.3	621.6	630.0	604.6	646.1	641.0	565.8	503.4	500.0
67.5°	5526.5	2786.1	761.8	567.5	586.9	554.8	592.0	580.2	518.5	468.7	465.4
70°	5578.0	2605.3	623.3	513.4	537.1	505.8	537.9	516.0	465.4	431.5	424.8
72.5°	5164.3	2165.3	490.7	456.8	477.1	451.8	479.7	454.4	408.0	392.7	380.1
75°	4272.4	1624.8	377.5	395.2	410.4	391.0	409.6	391.0	348.8	359.8	328.5
77.5°	3102.8	1097.1	288.8	330.3	336.9	326.9	342.9	321.7	283.7	281.3	268.5
80°	1542.9	642.7	226.3	261.0	258.4	251.6	270.3	260.1	228.1	241.5	239.0
82.5°	446.8	275.3	164.7	183.3	178.1	179.9	193.4	198.4	297.2	294.7	301.5
85°	140.2	108.1	98.8	102.2	97.2	99.6	114.0	226.3	209.4	122.5	132.6
87.5°	36.3	37.2	24.5	26.1	27.1	32.1	36.3	137.7	65.9	43.0	45.6
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)