

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: P963053

Luminaire Tested: **NAV-SB2D-750-U-T2**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P963053
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-3)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB2D-750-U-T2
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 70 CRI, 5000K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 21866.3 lumens
Efficiency: N/A
Efficacy: 148.1 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B3 - U0 - G3

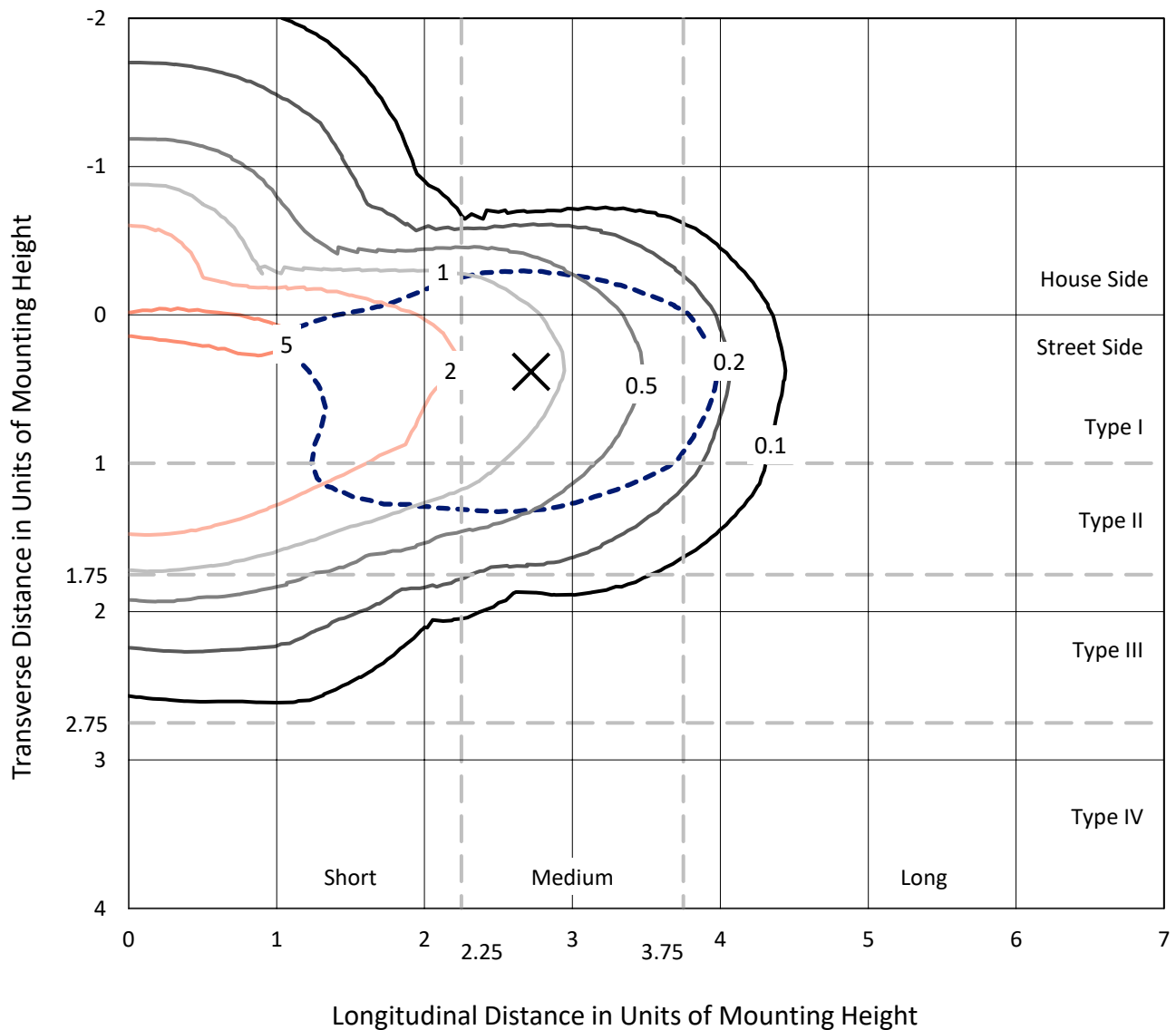
Input Watts (W): 147.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

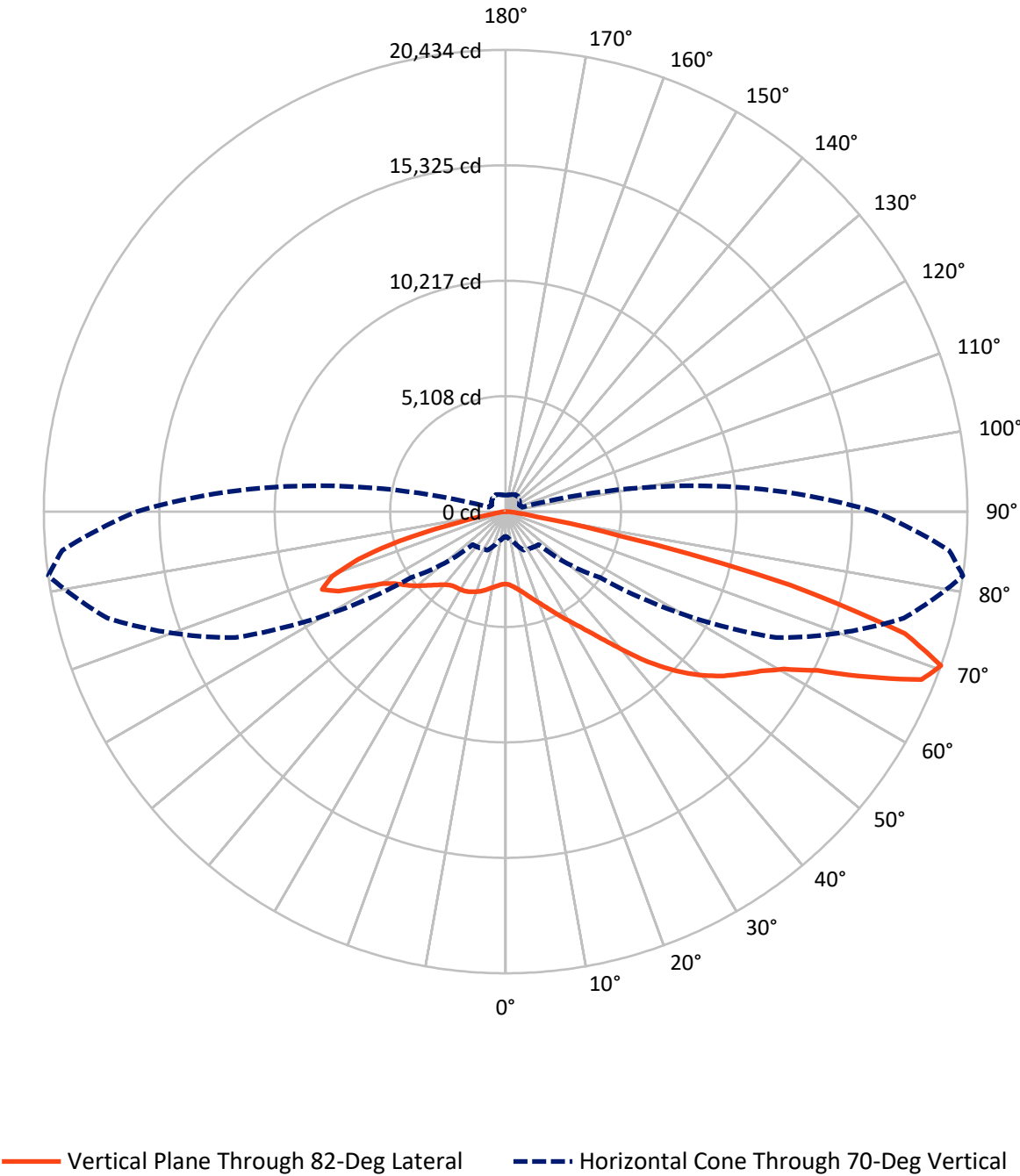
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.8 fc
Type II - Medium - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5390.6	0.0	5390.6
	% Fixture	24.7	0.0	24.7
Street Side	Lumens	16475.7	0.0	16475.7
	% Fixture	75.3	0.0	75.3
Total	Lumens	21866.3	0.0	21866.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	302.7	1.4
10°-20°	869.6	4.0
20°-30°	1454.8	6.7
30°-40°	2272.8	10.4
40°-50°	3619.7	16.6
50°-60°	5037.3	23.0
60°-70°	5269.3	24.1
70°-80°	2754.0	12.6
80°-90°	286.0	1.3
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°	21866.3	100.0
0°-180°	21866.3	100.0

Coefficient of Utilization



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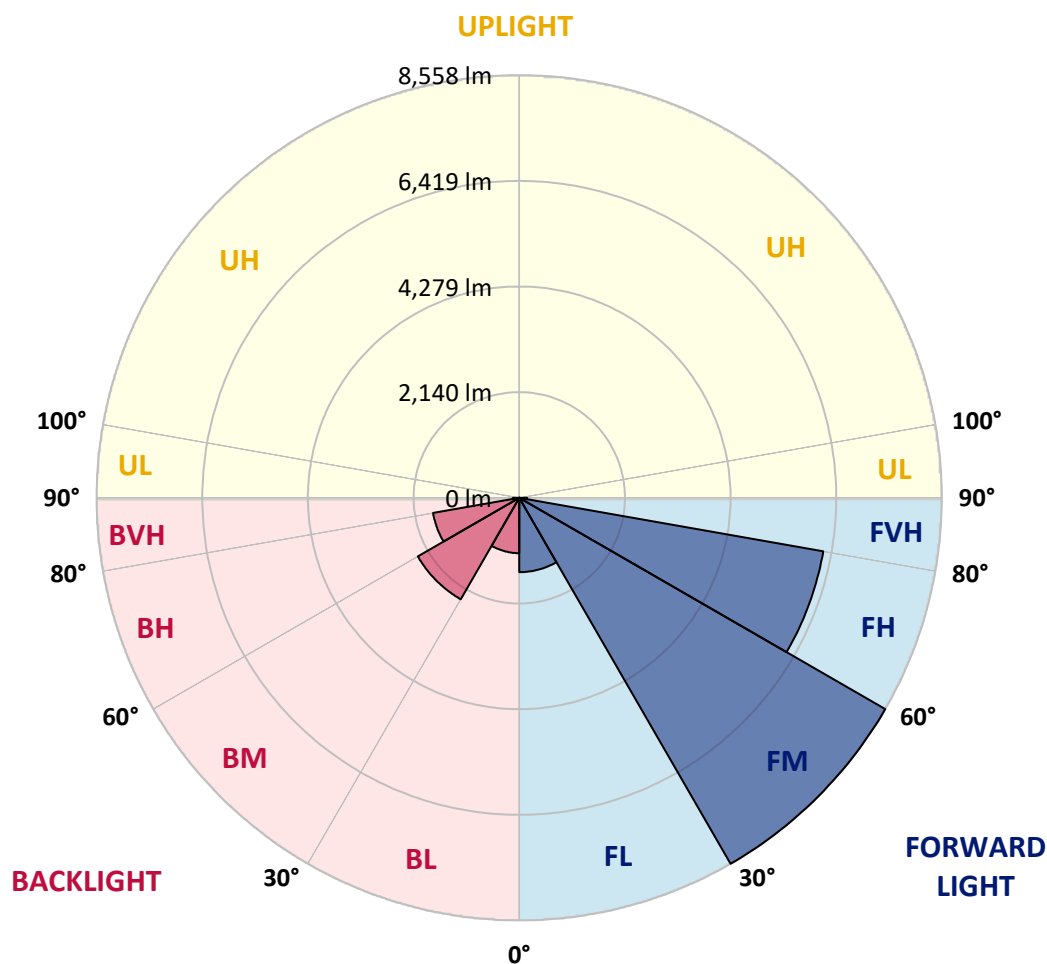
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1505.7	6.9			
FM	(30°-60°)	8558.3	39.1			
FH	(60°-80°)	6251.6	28.6			G3/7500
FVH	(80°-90°)	160.1	0.7			G2/225
BL	(0°-30°)	1121.4	5.1	B3/2500		
BM	(30°-60°)	2371.6	10.8	B2/2500		
BH	(60°-80°)	1771.6	8.1	B3/2500		G3/2500
BVH	(80°-90°)	125.9	0.6			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 II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	3205.9	3205.9	3205.9	3205.9	3205.9	3205.9	3205.9	3205.9	3205.9	3205.9	3205.9
2.5°	3282.5	3301.0	3295.2	3289.4	3289.4	3281.3	3280.1	3268.5	3259.3	3244.1	3240.6
5°	3324.2	3344.0	3341.6	3346.3	3361.4	3364.9	3368.4	3361.4	3342.8	3324.2	3316.1
7.5°	3287.1	3309.1	3316.1	3344.0	3390.4	3432.1	3463.5	3476.2	3458.9	3432.1	3419.4
10°	3161.8	3186.1	3210.5	3276.6	3359.0	3457.6	3541.2	3591.1	3587.6	3562.1	3540.0
12.5°	2907.7	2933.2	2985.4	3114.3	3265.0	3439.1	3594.6	3699.0	3735.0	3716.4	3678.1
15°	2704.7	2726.7	2766.2	2898.4	3094.5	3359.0	3614.3	3817.3	3909.0	3898.6	3852.2
17.5°	2698.8	2708.2	2732.4	2795.2	2946.0	3233.8	3593.4	3933.3	4108.6	4107.4	4049.4
20°	2800.9	2804.4	2818.3	2831.2	2916.9	3138.5	3540.0	4029.7	4332.5	4332.5	4269.8
22.5°	2942.5	2940.2	2954.0	2942.5	2984.3	3130.5	3506.4	4114.3	4582.0	4600.5	4521.7
25°	3154.8	3143.3	3139.8	3113.0	3121.1	3205.9	3543.5	4210.7	4877.9	4916.1	4817.5
27.5°	3438.0	3419.4	3406.6	3345.1	3324.2	3361.4	3657.2	4326.7	5207.4	5273.5	5148.2
30°	3807.0	3773.2	3754.7	3648.0	3572.5	3578.4	3829.0	4481.0	5552.0	5658.7	5499.7
32.5°	4310.4	4258.3	4208.3	4033.2	3895.1	3849.8	4050.6	4694.5	5925.6	6096.2	5891.9
35°	4874.4	4832.6	4779.3	4508.9	4296.6	4192.1	4349.9	4992.7	6363.0	6633.4	6367.7
37.5°	5417.4	5381.5	5407.0	5042.6	4768.8	4616.8	4742.1	5393.0	6902.6	7301.7	6964.1
40°	5978.9	5951.2	5954.6	5606.5	5287.5	5116.9	5217.9	5895.4	7521.0	8096.5	7681.1
42.5°	6589.3	6568.4	6498.8	6190.2	5831.6	5672.7	5765.5	6475.5	8184.6	9001.6	8467.8
45°	7272.7	7260.0	7195.0	6841.1	6430.3	6251.7	6376.9	7116.1	8851.8	9853.1	9257.9
47.5°	7863.3	7873.7	7865.6	7567.4	7141.6	6879.4	7029.0	7784.4	9472.6	10653.7	10015.6
50°	8147.5	8202.0	8282.1	8189.3	7924.8	7657.9	7686.9	8429.5	10064.4	11404.5	10742.0
52.5°	7999.0	8102.3	8320.4	8469.0	8571.0	8515.4	8437.6	9070.0	10621.3	12082.1	11428.9
55°	7445.6	7590.6	7952.7	8311.1	8832.1	9237.1	9339.2	9780.0	11164.3	12678.4	12078.6
57.5°	6437.3	6672.9	6997.7	7722.9	8600.1	9586.3	10390.4	10765.2	11739.8	13315.5	12758.5
60°	4708.4	5024.0	5427.8	6506.9	7787.8	9399.5	11284.9	12278.2	12557.8	14140.4	13643.9
62.5°	3013.3	3208.1	3579.5	4595.9	6068.3	8442.2	11558.8	14169.4	13944.3	15493.3	14971.1
65°	2063.0	2188.3	2528.3	3099.1	3923.0	6284.2	10825.5	15587.3	16146.6	17637.6	17240.7
67.5°	1499.1	1594.3	1884.3	2384.4	2556.1	3718.7	8400.5	15522.3	18287.3	19846.8	19229.4
70°	1093.0	1160.3	1403.9	1884.3	1966.7	2068.8	5089.0	13194.8	18240.9	20433.9	19694.8
72.5°	809.9	856.3	1019.9	1462.0	1591.9	1397.0	2518.9	9589.8	15674.3	18482.2	17889.3
75°	586.0	620.7	741.4	1118.5	1274.0	1063.9	1256.5	5604.2	10933.4	13001.0	13105.4
77.5°	447.8	474.6	553.5	819.2	1019.9	798.3	779.7	2578.2	5184.1	5209.7	5502.1
80°	359.7	377.1	420.0	576.7	782.1	597.6	508.2	1040.8	1638.4	1386.5	1455.0
82.5°	264.6	293.6	355.1	405.0	559.2	411.9	309.8	525.6	623.1	536.1	540.7
85°	150.9	170.6	214.6	290.1	357.4	251.7	177.5	233.2	290.1	237.9	212.4
87.5°	53.4	69.6	75.4	113.7	155.5	104.4	68.5	67.3	95.1	70.8	59.1
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°	3205.9	3205.9	3205.9	3205.9	3205.9	3205.9	3205.9	3205.9	3205.9	3205.9	3205.9
2.5°	3229.1	3223.3	3200.0	3168.8	3136.3	3104.9	3094.5	3072.4	3057.4	3049.3	3058.5
5°	3294.0	3275.5	3221.0	3151.4	3078.3	2999.4	2943.7	2892.5	2855.4	2820.7	2834.5
7.5°	3386.9	3354.4	3260.4	3138.5	3008.6	2877.5	2780.0	2705.8	2655.9	2623.4	2630.4
10°	3494.7	3444.9	3301.0	3118.9	2918.2	2730.2	2615.3	2551.4	2520.2	2502.7	2507.4
12.5°	3619.0	3548.1	3342.8	3073.6	2780.0	2565.4	2486.5	2467.9	2469.1	2470.2	2472.6
15°	3772.1	3673.5	3376.5	2975.0	2600.2	2438.9	2425.0	2455.2	2486.5	2501.6	2500.4
17.5°	3945.0	3805.7	3382.2	2812.5	2423.8	2357.7	2401.8	2466.8	2514.3	2535.2	2539.8
20°	4130.6	3940.3	3340.5	2582.8	2278.8	2291.6	2370.5	2454.1	2506.2	2532.9	2539.8
22.5°	4342.9	4084.2	3240.6	2341.5	2160.5	2219.6	2312.5	2393.7	2448.2	2474.9	2481.8
25°	4585.4	4245.4	3084.0	2138.5	2058.3	2138.5	2231.2	2298.6	2342.6	2367.0	2373.9
27.5°	4854.6	4413.8	2875.2	1977.1	1969.0	2054.9	2131.5	2183.7	2206.8	2225.5	2232.3
30°	5125.0	4566.9	2622.3	1855.2	1891.2	1972.5	2027.0	2050.2	2057.2	2060.7	2068.8
32.5°	5417.4	4699.2	2356.6	1754.4	1817.0	1892.5	1925.0	1935.4	1902.9	1880.9	1887.7
35°	5771.3	4840.8	2096.6	1674.3	1743.9	1808.9	1819.4	1810.0	1771.7	1726.5	1728.9
37.5°	6208.7	5017.1	1889.0	1617.4	1675.5	1718.4	1705.6	1703.3	1706.8	1653.4	1656.9
40°	6744.7	5246.9	1737.0	1573.4	1619.8	1629.0	1593.1	1612.8	1630.2	1549.0	1551.3
42.5°	7340.0	5524.1	1640.6	1543.1	1573.4	1551.3	1495.6	1517.6	1515.4	1408.6	1407.4
45°	7946.8	5825.8	1607.0	1521.1	1530.4	1486.4	1424.9	1430.6	1381.9	1285.6	1289.0
47.5°	8550.1	6149.5	1627.9	1502.5	1477.0	1427.1	1379.5	1354.0	1282.1	1210.2	1210.2
50°	9141.9	6489.5	1704.5	1465.4	1403.9	1374.9	1340.1	1294.9	1218.3	1156.8	1152.2
52.5°	9690.8	6831.7	1790.4	1403.9	1312.3	1329.7	1307.7	1255.4	1180.0	1117.4	1118.5
55°	10210.5	7174.1	1824.0	1319.3	1226.4	1290.3	1277.5	1181.2	1090.7	1039.7	1034.9
57.5°	10776.7	7585.9	1786.9	1211.3	1156.8	1245.0	1196.3	1089.5	1037.3	999.0	995.5
60°	11561.1	8232.3	1706.8	1077.9	1090.7	1177.7	1094.2	1050.0	993.2	950.3	947.9
62.5°	12864.2	9437.8	1578.0	945.7	1012.9	1077.9	1045.4	1001.3	943.3	901.6	901.6
65°	14790.2	11113.3	1335.5	842.3	925.9	980.4	993.2	949.1	888.8	844.7	847.1
67.5°	16414.6	12164.5	1010.6	756.6	836.6	901.6	937.5	894.6	830.8	787.8	789.0
70°	16325.3	11401.0	771.6	671.8	757.7	823.8	870.2	836.6	768.1	727.5	731.0
72.5°	14500.2	9537.5	624.2	586.0	677.6	742.6	798.3	772.7	703.2	663.7	663.7
75°	10652.6	6770.3	499.0	499.0	577.8	657.8	719.3	703.2	639.3	611.5	603.3
77.5°	4490.3	2840.4	391.0	414.2	480.3	565.1	641.6	647.4	591.7	626.6	568.6
80°	1193.9	783.2	298.2	326.1	377.1	466.5	558.1	555.8	495.5	463.0	430.5
82.5°	454.8	308.6	212.4	229.7	272.6	357.4	442.1	456.0	395.6	342.2	342.2
85°	175.2	132.2	131.1	138.1	159.0	236.7	334.2	345.7	298.2	253.0	261.1
87.5°	45.2	39.5	48.7	46.4	73.1	126.5	191.5	198.4	182.1	105.6	150.9
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)