

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: P965098

Luminaire Tested: **NAV-SB3D-735-U-T2U**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P965098
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-16)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB3D-735-U-T2U
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 70 CRI, 3500K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II U OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 31714.5 lumens
Efficiency: N/A
Efficacy: 145.4 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B4 - U0 - G4

Input Watts (W): 218.1
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

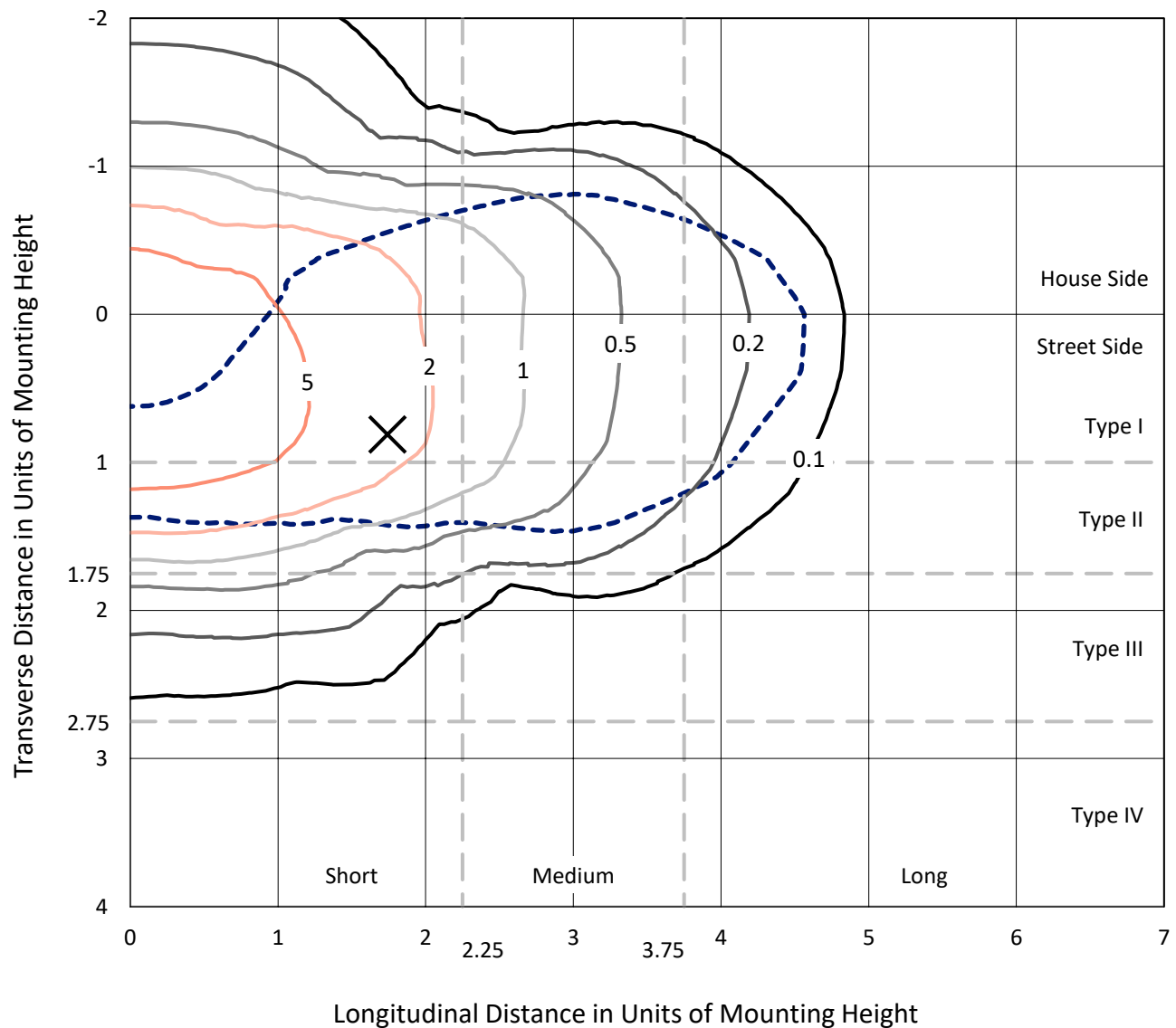


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Iso-Footcandle Lines of Horizontal Illumination

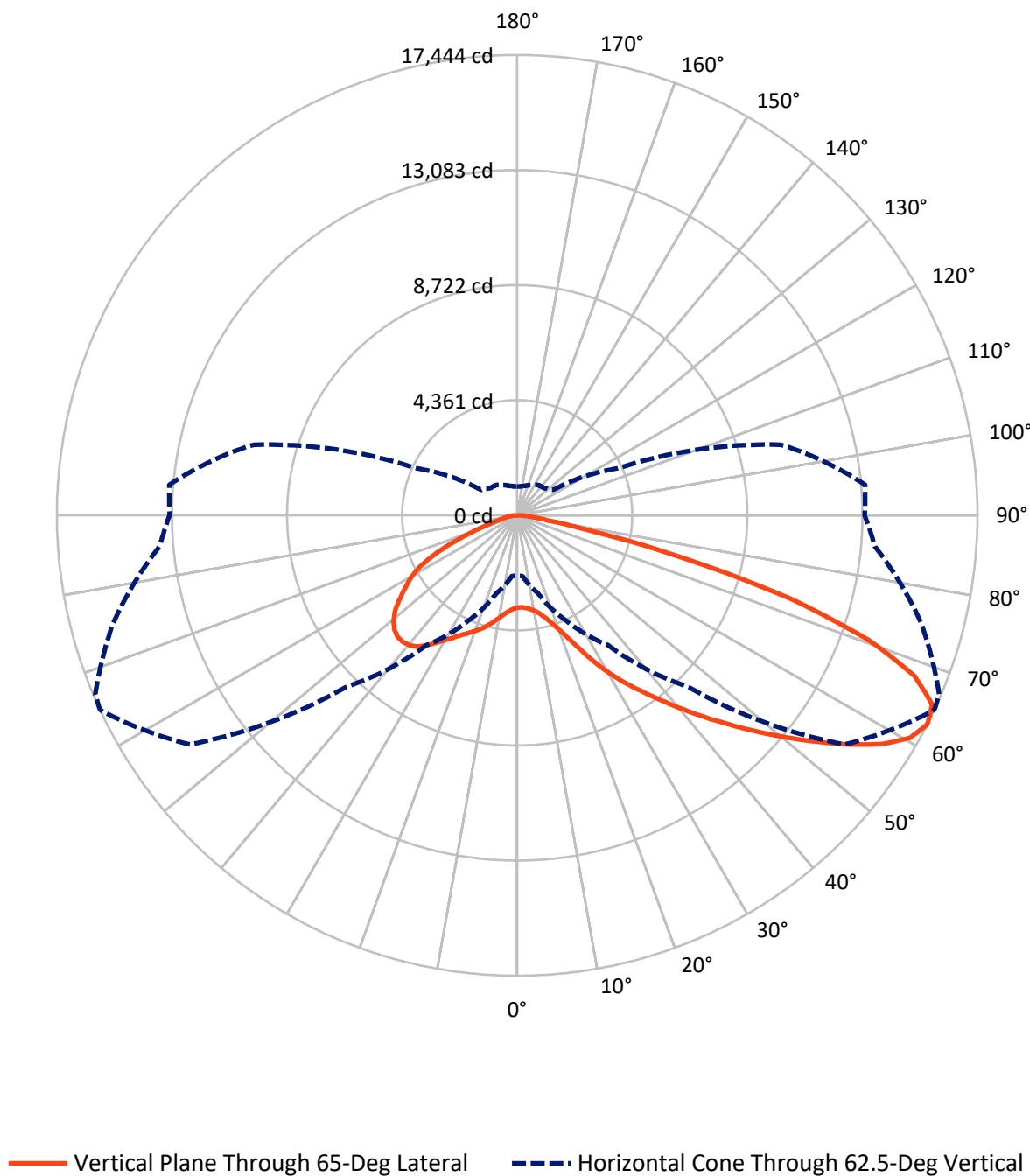
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.9 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	10007.7	0.0	10007.7
	% Fixture	31.6	0.0	31.6
Street Side	Lumens	21706.8	0.0	21706.8
	% Fixture	68.4	0.0	68.4
Total	Lumens	31714.5	0.0	31714.5
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	348.4	1.1
10°-20°	1181.6	3.7
20°-30°	2395.7	7.6
30°-40°	4145.8	13.1
40°-50°	6273.8	19.8
50°-60°	7355.6	23.2
60°-70°	6166.8	19.4
70°-80°	3404.6	10.7
80°-90°	442.2	1.4
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°	31714.5	100.0
0°-180°	31714.5	100.0

Coefficient of Utilization



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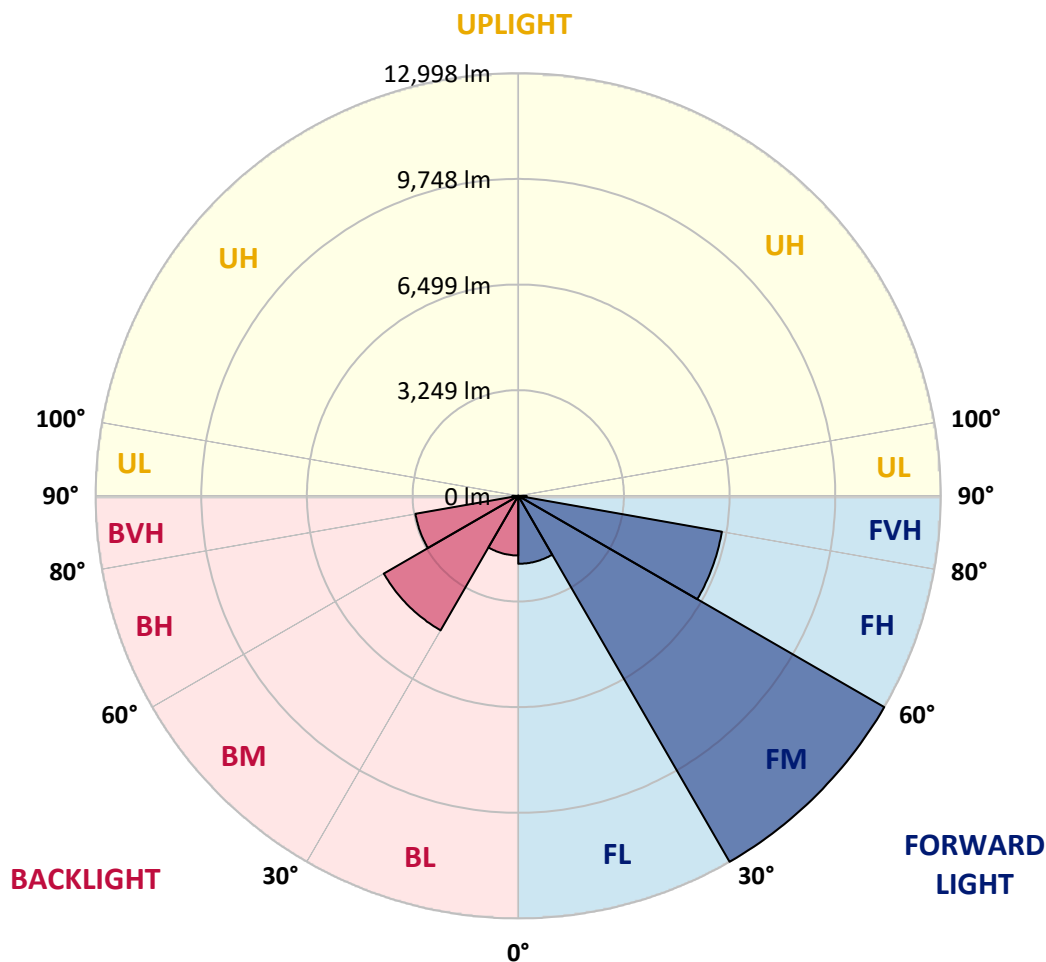
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2090.4	6.6			
FM	(30°-60°)	12997.6	41.0			
FH	(60°-80°)	6361.0	20.1			G3/7500
FVH	(80°-90°)	257.8	0.8			G3/500
BL	(0°-30°)	1835.3	5.8	B3/2500		
BM	(30°-60°)	4777.5	15.1	B3/5000		
BH	(60°-80°)	3210.4	10.1	B4/5000		G4/5000
BVH	(80°-90°)	184.5	0.6			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G4

Type II Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	67°	75°	85°
0°	3494.8	3494.8	3494.8	3494.8	3494.8	3494.8	3494.8	3494.8	3494.8	3494.8	3494.8
2.5°	3471.8	3461.9	3470.1	3470.1	3473.4	3471.8	3483.3	3486.5	3491.6	3501.4	3501.4
5°	3437.2	3435.6	3450.4	3463.6	3476.7	3488.2	3503.0	3524.5	3527.7	3539.2	3554.1
7.5°	3425.7	3415.8	3438.9	3455.3	3486.5	3514.5	3554.1	3590.3	3605.0	3609.9	3637.9
10°	3514.5	3498.1	3519.4	3529.4	3555.7	3583.6	3629.7	3687.3	3703.7	3723.5	3754.8
12.5°	3665.9	3647.9	3679.1	3693.9	3718.6	3743.3	3774.6	3830.4	3838.7	3874.9	3904.5
15°	3873.3	3851.8	3871.6	3889.7	3930.9	3953.8	3985.1	4039.4	4039.4	4067.4	4088.8
17.5°	4154.6	4126.6	4141.4	4148.1	4174.3	4208.9	4261.5	4309.3	4333.9	4324.1	4294.4
20°	4574.2	4539.6	4539.6	4506.7	4496.9	4524.9	4593.9	4659.8	4686.1	4635.0	4562.7
22.5°	5204.3	5155.0	5127.0	5015.1	4970.7	4974.0	5043.1	5123.8	5145.1	5054.6	4891.7
25°	6005.7	5928.3	5890.5	5726.0	5625.6	5538.4	5592.7	5696.3	5726.0	5614.0	5350.8
27.5°	6806.9	6811.9	6775.7	6578.2	6412.1	6252.5	6224.5	6333.1	6364.3	6237.6	5911.9
30°	7930.7	7814.0	7744.8	7507.9	7270.9	7047.2	6932.0	6976.5	6984.7	6833.3	6454.8
32.5°	8899.9	8870.2	8722.2	8514.9	8210.5	7860.0	7667.5	7596.8	7583.6	7368.0	6918.9
35°	10004.0	9987.5	9831.2	9584.4	9255.3	8768.3	8421.1	8218.8	8202.3	7899.5	7377.9
37.5°	11126.1	11126.1	10973.1	10703.3	10362.6	9753.9	9225.7	8904.8	8852.2	8457.3	7845.2
40°	12021.2	11966.9	11994.9	11881.4	11491.4	10844.7	10119.1	9653.4	9582.7	9108.9	8342.1
42.5°	12529.6	12511.6	12679.4	12806.0	12646.4	12129.7	11103.1	10464.6	10365.9	9826.3	8914.7
45°	12643.2	12623.4	12922.9	13386.9	13610.7	13398.4	12172.6	11318.7	11198.5	10576.6	9528.4
47.5°	12381.6	12342.0	12781.3	13513.6	14231.0	14604.5	13330.9	12245.0	12070.6	11307.1	10158.7
50°	11595.0	11557.2	12221.9	13194.3	14439.9	15423.9	14588.0	13227.3	12960.7	12090.3	10795.4
52.5°	9885.5	9903.6	10945.2	12281.1	14165.2	15933.9	15670.7	14262.3	13941.3	12891.6	11392.7
55°	7700.4	7739.9	9020.0	10491.0	13066.0	15856.6	16409.4	15328.5	15009.2	13645.2	12009.7
57.5°	5513.7	5688.1	6887.6	8343.8	10955.0	14630.7	16570.7	16342.0	16032.6	14467.9	12613.5
60°	3573.8	3605.0	4839.1	6306.7	8342.1	12452.3	16243.3	17110.4	16868.5	15307.0	13118.7
62.5°	2290.4	2311.8	3063.7	4411.3	6004.0	9212.5	15140.9	17444.4	17370.4	15861.6	13604.1
65°	1683.3	1666.8	2058.4	2915.6	4044.3	5681.5	13000.2	17283.1	17429.6	16208.7	14005.5
67.5°	1405.2	1382.1	1574.6	2018.8	2979.8	3226.6	9618.9	16235.1	16771.5	16169.3	14300.1
70°	1280.1	1260.3	1377.2	1499.0	2324.9	2160.4	4849.0	14114.1	14940.1	15720.0	14252.3
72.5°	1084.3	1049.8	1209.4	1331.2	1808.3	1656.9	2004.1	10841.4	11848.4	14280.3	13581.0
75°	840.8	817.7	954.3	1171.5	1359.0	1293.2	1266.9	6583.2	7682.3	11043.9	11881.4
77.5°	666.4	635.1	760.1	913.2	1222.5	975.7	923.0	2835.0	3924.2	7050.5	8890.0
80°	501.8	473.9	577.5	722.3	939.5	735.4	597.3	1156.7	1479.2	3572.1	4470.5
82.5°	357.0	332.4	403.1	529.8	631.8	659.8	367.0	648.3	728.9	1377.2	998.8
85°	228.7	213.9	269.9	332.4	401.5	424.6	223.8	339.0	371.9	567.6	416.3
87.5°	125.0	102.0	144.8	154.7	185.9	169.4	106.9	123.4	133.2	205.7	176.1
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°	3494.8	3494.8	3494.8	3494.8	3494.8	3494.8	3494.8	3494.8	3494.8	3494.8	3494.8
2.5°	3508.0	3512.9	3529.4	3534.3	3545.8	3560.6	3570.5	3580.3	3580.3	3590.3	3590.3
5°	3555.7	3567.2	3601.7	3619.9	3649.5	3679.1	3697.2	3718.6	3731.7	3738.3	3741.7
7.5°	3647.9	3665.9	3715.3	3746.6	3797.5	3838.7	3866.7	3896.2	3902.9	3920.9	3914.4
10°	3772.9	3794.2	3850.2	3909.5	3970.3	4021.3	4047.6	4069.0	4077.2	4080.5	4072.3
12.5°	3916.0	3947.3	4019.6	4092.1	4156.3	4200.7	4207.2	4202.3	4179.3	4159.6	4159.6
15°	4092.1	4120.1	4200.7	4279.7	4342.2	4350.4	4309.3	4283.0	4255.0	4250.1	4250.1
17.5°	4302.6	4317.5	4391.5	4468.9	4473.8	4445.8	4385.0	4360.2	4333.9	4315.9	4317.5
20°	4547.8	4542.9	4595.6	4628.5	4593.9	4508.4	4416.2	4375.1	4348.8	4327.3	4329.0
22.5°	4840.8	4802.8	4796.3	4788.1	4695.9	4516.6	4391.5	4338.9	4297.7	4268.1	4278.0
25°	5266.9	5122.1	5021.7	4965.8	4758.5	4472.2	4312.6	4195.7	4118.4	4067.4	4087.2
27.5°	5800.0	5556.4	5303.0	5166.5	4758.5	4381.7	4121.7	3932.5	3805.8	3753.1	3779.5
30°	6308.5	6053.3	5679.8	5408.4	4747.0	4233.6	3814.0	3550.7	3402.7	3350.0	3381.3
32.5°	6742.8	6464.8	6079.7	5673.3	4719.0	3993.4	3432.3	3141.0	2997.9	2935.4	2966.7
35°	7145.9	6849.8	6481.2	5964.6	4644.9	3641.2	3012.7	2790.6	2631.0	2530.6	2563.5
37.5°	7558.9	7206.8	6861.2	6227.8	4511.6	3229.9	2690.2	2501.0	2313.4	2178.5	2214.7
40°	8008.1	7586.8	7267.7	6384.1	4292.8	2838.3	2440.1	2267.3	2068.2	1925.1	1953.0
42.5°	8533.0	8042.7	7720.2	6464.8	3993.4	2560.2	2277.2	2107.7	1920.1	1803.4	1826.3
45°	9080.9	8544.5	8133.2	6463.0	3659.4	2430.3	2224.6	2056.8	1849.4	1727.6	1747.4
47.5°	9655.1	9069.4	8490.2	6357.8	3369.8	2448.3	2194.9	1946.5	1717.8	1599.3	1615.8
50°	10231.0	9643.6	8835.7	6160.4	3246.4	2408.9	2084.7	1791.8	1522.0	1415.0	1421.6
52.5°	10802.0	10254.1	9133.6	5879.0	3121.3	2262.4	1943.2	1591.1	1441.4	1367.4	1367.4
55°	11376.2	10857.9	9457.7	5469.3	2808.7	2091.3	1706.3	1515.4	1377.2	1309.7	1303.2
57.5°	11952.1	11555.5	9765.4	5059.6	2415.4	1880.7	1576.2	1423.2	1313.0	1255.4	1245.6
60°	12551.0	12353.6	10082.9	4682.8	2027.1	1610.8	1480.8	1349.2	1237.4	1173.1	1168.2
62.5°	13168.1	13232.2	10331.4	4197.4	1670.0	1446.3	1395.3	1260.3	1151.8	1090.9	1089.3
65°	13790.0	14079.6	10494.3	3524.5	1354.1	1290.0	1303.2	1163.3	1053.1	1000.4	998.8
67.5°	14258.9	14690.0	10448.2	2667.2	1110.6	1141.8	1188.0	1061.3	957.7	916.5	918.1
70°	14311.6	14617.6	9994.1	1826.3	929.7	997.1	1059.6	960.9	853.9	824.3	825.9
72.5°	13610.7	13630.3	8728.8	1192.9	786.5	875.4	924.8	858.8	755.2	725.6	724.0
75°	11772.7	11272.5	6408.8	786.5	658.2	751.9	798.0	751.9	651.6	658.2	635.1
77.5°	8919.7	7983.4	3891.3	559.4	549.6	631.8	694.3	661.4	575.8	646.7	569.3
80°	4595.6	4319.1	1735.8	417.9	434.4	505.1	570.9	528.2	455.8	434.4	396.6
82.5°	1053.1	1224.2	684.5	299.5	314.3	363.7	436.0	396.6	327.4	276.4	273.2
85°	368.6	403.1	302.8	187.6	184.3	227.0	296.1	264.9	222.1	177.7	187.6
87.5°	116.8	153.0	113.6	75.6	79.0	102.0	136.5	125.0	103.6	67.4	70.7
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)