

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: P969315

Luminaire Tested: **NAV-SB5D-735-U-T2**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P969315
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-SB5D-735-U-T2
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 70 CRI, 3500K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 52206.3 lumens
Efficiency: N/A
Efficacy: 143.1 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B4 - U0 - G5

Input Watts (W): 364.9
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



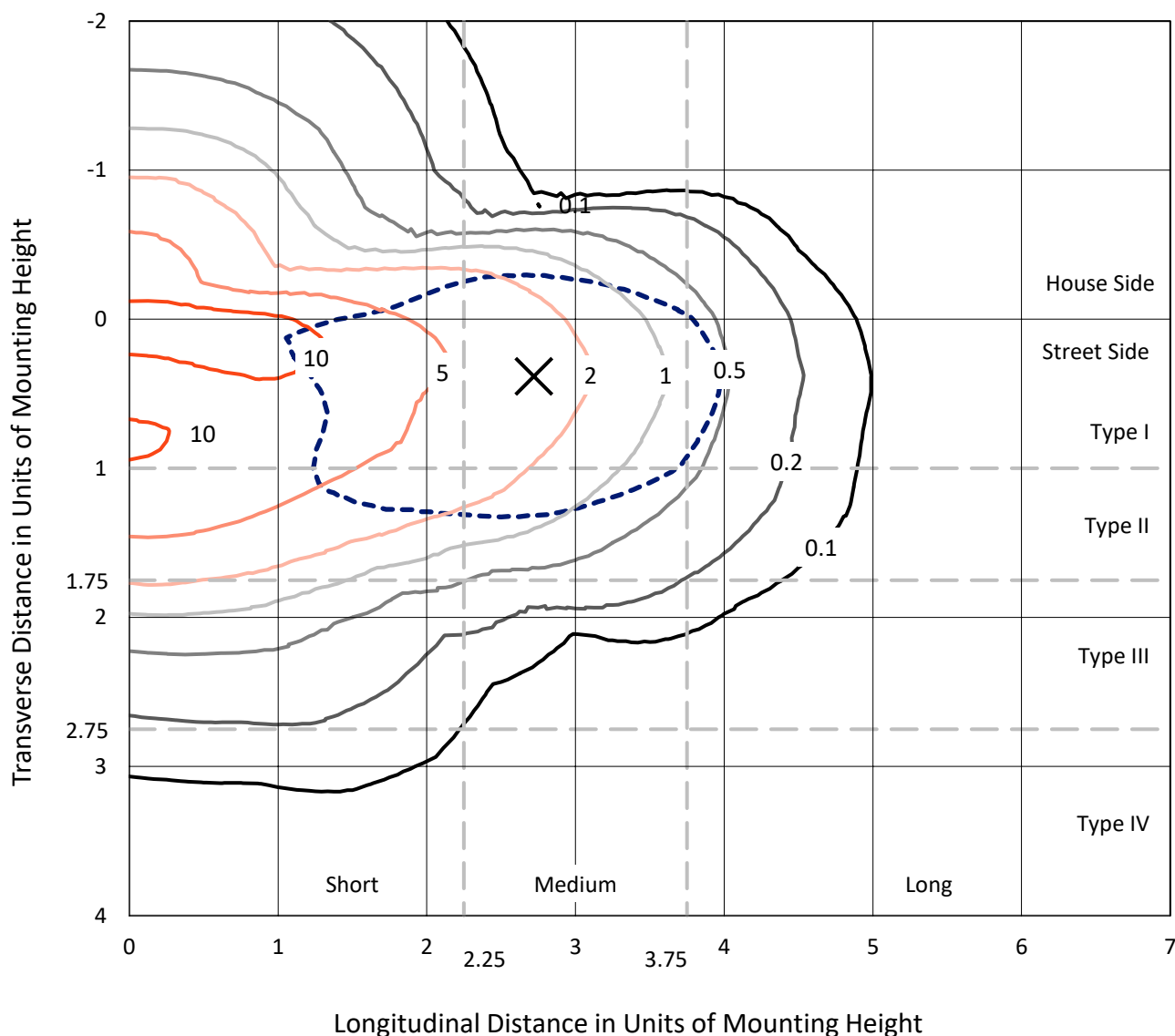
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

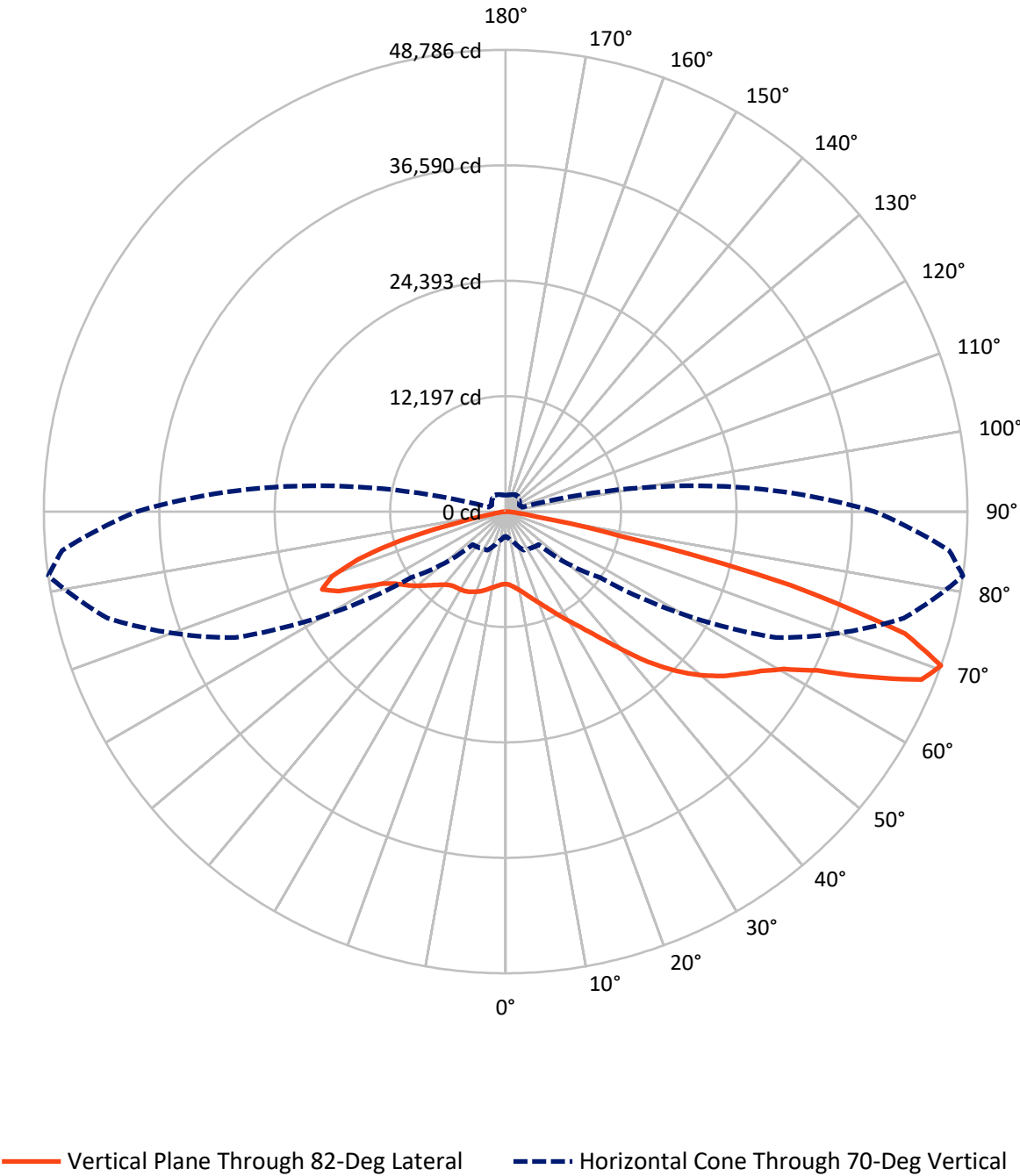
--- 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 13.9 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	12870.1	0.0	12870.1
	% Fixture	24.7	0.0	24.7
Street Side	Lumens	39336.2	0.0	39336.2
	% Fixture	75.3	0.0	75.3
Total	Lumens	52206.3	0.0	52206.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	722.7	1.4
10°-20°	2076.3	4.0
20°-30°	3473.5	6.7
30°-40°	5426.4	10.4
40°-50°	8642.2	16.6
50°-60°	12026.7	23.0
60°-70°	12580.5	24.1
70°-80°	6575.2	12.6
80°-90°	682.8	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°	52206.3	100.0
0°-180°	52206.3	100.0

Coefficient of Utilization



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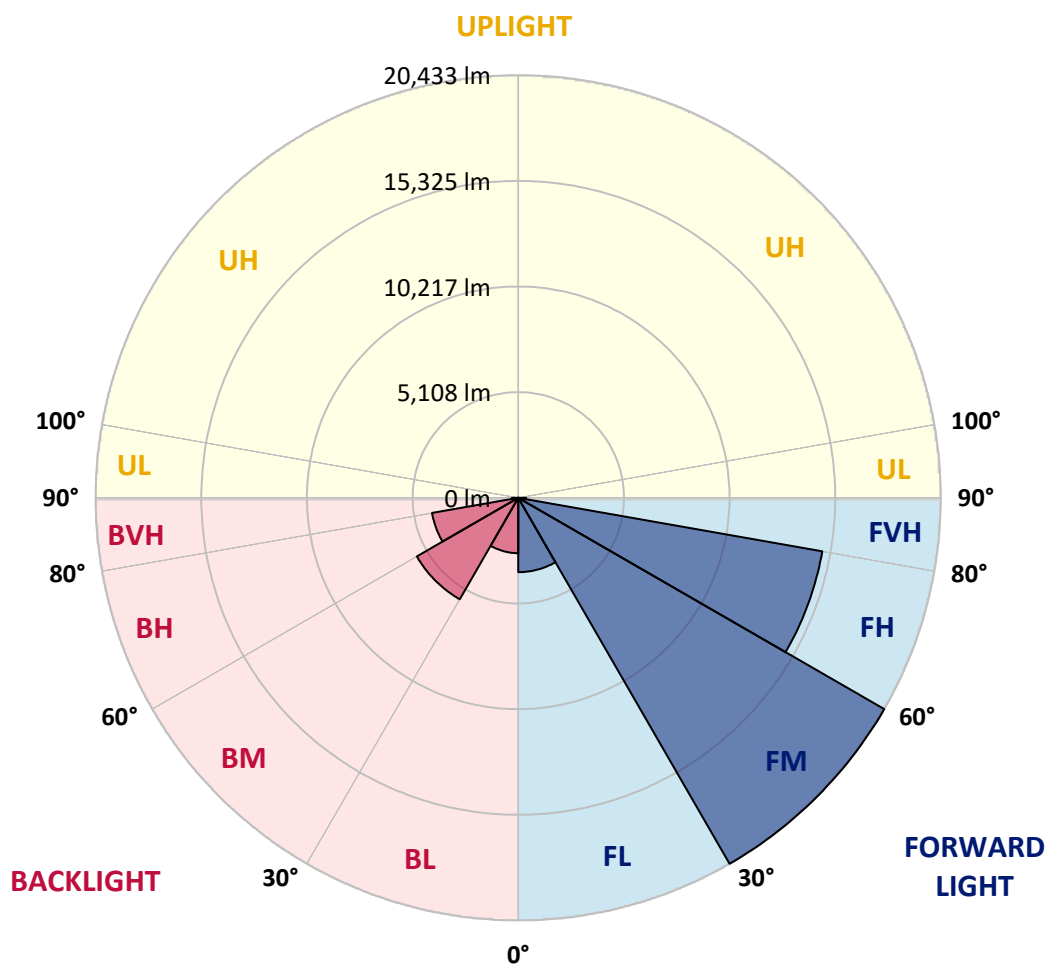
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	3595.0	6.9			
FM	(30°-60°)	20433.0	39.1			
FH	(60°-80°)	14926.0	28.6			G5
FVH	(80°-90°)	382.2	0.7			G3/500
BL	(0°-30°)	2677.5	5.1	B4/5000		
BM	(30°-60°)	5662.4	10.8	B4/8500		
BH	(60°-80°)	4229.8	8.1	B4/5000		G4/5000
BVH	(80°-90°)	300.6	0.6			G3/500
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G5

Type II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	7654.1	7654.1	7654.1	7654.1	7654.1	7654.1	7654.1	7654.1	7654.1	7654.1	7654.1
2.5°	7836.9	7881.2	7867.4	7853.6	7853.6	7834.2	7831.4	7803.7	7781.5	7745.5	7737.2
5°	7936.7	7983.7	7978.2	7989.3	8025.3	8033.6	8041.9	8025.3	7981.0	7936.7	7917.3
7.5°	7848.0	7900.7	7917.3	7983.7	8094.5	8194.3	8269.1	8299.5	8258.0	8194.3	8163.8
10°	7548.8	7607.0	7665.2	7823.1	8019.8	8255.2	8454.7	8573.8	8565.5	8504.5	8451.9
12.5°	6942.1	7003.1	7127.7	7435.2	7795.3	8210.9	8582.1	8831.4	8917.3	8873.0	8781.6
15°	6457.4	6510.0	6604.2	6920.0	7388.2	8019.8	8629.2	9114.0	9332.8	9307.9	9197.1
17.5°	6443.6	6465.7	6523.8	6673.5	7033.6	7720.6	8579.4	9391.0	9809.4	9806.6	9668.0
20°	6687.3	6695.6	6728.8	6759.4	6964.4	7493.5	8451.9	9621.0	10344.0	10344.0	10194.3
22.5°	7025.2	7019.7	7052.9	7025.2	7125.0	7474.0	8371.6	9823.2	10939.6	10983.9	10795.5
25°	7532.2	7504.5	7496.2	7432.5	7451.9	7654.1	8460.2	10053.1	11645.9	11737.4	11501.9
27.5°	8208.1	8163.8	8133.4	7986.5	7936.7	8025.3	8731.7	10330.2	12432.7	12590.6	12291.4
30°	9089.1	9008.7	8964.4	8709.5	8529.5	8543.4	9141.7	10698.5	13255.5	13510.3	13130.8
32.5°	10291.3	10166.7	10047.6	9629.3	9299.6	9191.6	9670.8	11208.3	14147.5	14554.7	14067.1
35°	11637.6	11537.9	11410.5	10765.1	10258.1	10008.8	10385.5	11920.2	15191.8	15837.3	15202.9
37.5°	12934.2	12848.3	12909.2	12039.3	11385.6	11022.6	11321.8	12875.9	16479.9	17433.0	16626.8
40°	14274.9	14208.4	14216.7	13385.7	12623.9	12216.7	12457.6	14075.5	17956.6	19330.6	18338.8
42.5°	15732.0	15682.2	15515.9	14779.1	13923.1	13543.5	13765.2	15460.6	19541.1	21491.3	20217.0
45°	17363.7	17333.3	17178.1	16333.2	15352.6	14925.9	15225.0	16989.7	21134.0	23524.7	22103.5
47.5°	18773.7	18798.7	18779.2	18067.4	17050.7	16424.6	16781.9	18585.4	22616.0	25436.1	23912.5
50°	19452.4	19582.6	19773.8	19552.2	18920.6	18283.4	18352.6	20125.6	24028.9	27228.4	25646.6
52.5°	19097.9	19344.4	19865.2	20219.8	20463.6	20330.6	20145.0	21654.8	25358.5	28846.3	27286.6
55°	17776.5	18122.7	18987.0	19843.1	21086.9	22053.7	22297.4	23350.1	26655.0	30270.1	28838.0
57.5°	15369.2	15931.5	16707.2	18438.5	20532.8	22887.5	24807.3	25702.1	28029.0	31791.0	30461.3
60°	11241.5	11995.1	12959.1	15535.3	18593.7	22441.5	26943.0	29314.4	29982.1	33760.6	32574.9
62.5°	7194.3	7659.6	8546.1	10972.8	14488.2	20156.1	27596.9	33829.8	33292.4	36990.7	35744.1
65°	4925.4	5224.6	6036.3	7399.3	9366.1	15003.4	25846.1	37215.1	38550.2	42110.0	41162.6
67.5°	3579.1	3806.2	4498.8	5692.7	6102.7	8878.6	20056.4	37059.9	43661.3	47384.5	45910.8
70°	2609.5	2770.2	3352.0	4498.8	4695.5	4939.3	12150.1	31502.9	43550.5	48786.2	47021.6
72.5°	1933.6	2044.5	2435.0	3490.4	3800.7	3335.4	6014.1	22895.8	37422.9	44126.8	42711.1
75°	1398.9	1482.0	1770.2	2670.5	3041.7	2540.3	3000.2	13380.1	26103.7	31040.3	31289.6
77.5°	1069.3	1133.0	1321.4	1955.8	2435.0	1905.9	1861.6	6155.4	12377.3	12438.3	13136.4
80°	858.7	900.4	1002.9	1376.8	1867.1	1426.7	1213.4	2484.9	3911.5	3310.4	3473.8
82.5°	631.6	700.9	847.7	966.8	1335.3	983.4	739.6	1254.9	1487.6	1279.8	1290.9
85°	360.1	407.2	512.5	692.6	853.2	601.2	423.8	556.8	692.6	567.8	507.0
87.5°	127.4	166.3	180.1	271.5	371.3	249.3	163.5	160.7	227.1	169.0	141.2
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°	7654.1	7654.1	7654.1	7654.1	7654.1	7654.1	7654.1	7654.1	7654.1	7654.1	7654.1
2.5°	7709.5	7695.7	7640.2	7565.4	7487.9	7413.1	7388.2	7335.5	7299.5	7280.2	7302.3
5°	7864.6	7820.3	7690.1	7523.9	7349.4	7161.0	7028.0	6906.1	6817.5	6734.4	6767.7
7.5°	8086.2	8008.7	7784.3	7493.5	7183.2	6870.2	6637.4	6460.2	6341.1	6263.5	6280.1
10°	8343.9	8224.8	7881.2	7446.3	6967.1	6518.3	6244.1	6091.7	6017.0	5975.3	5986.4
12.5°	8640.3	8471.3	7981.0	7338.3	6637.4	6125.0	5936.6	5892.2	5895.0	5897.7	5903.3
15°	9006.0	8770.5	8061.3	7102.8	6208.0	5823.0	5789.7	5861.8	5936.6	5972.6	5969.8
17.5°	9418.7	9086.3	8075.2	6715.0	5786.9	5629.1	5734.4	5889.4	6003.0	6052.9	6064.0
20°	9861.9	9407.7	7975.4	6166.5	5440.7	5471.1	5659.5	5859.0	5983.6	6047.4	6064.0
22.5°	10368.9	9751.1	7737.2	5590.2	5158.1	5299.5	5521.1	5715.0	5845.2	5908.8	5925.5
25°	10947.9	10136.2	7363.2	5105.5	4914.4	5105.5	5327.1	5487.7	5593.0	5651.2	5667.8
27.5°	11590.6	10537.9	6864.6	4720.4	4701.1	4906.1	5088.9	5213.6	5268.9	5313.3	5329.9
30°	12236.0	10903.5	6260.7	4429.5	4515.4	4709.4	4839.5	4895.0	4911.6	4919.9	4939.3
32.5°	12934.2	11219.3	5626.3	4188.6	4338.1	4518.2	4595.8	4620.7	4543.1	4490.5	4507.1
35°	13779.1	11557.3	5005.8	3997.4	4163.7	4318.7	4343.7	4321.5	4230.1	4122.0	4127.6
37.5°	14823.4	11978.4	4509.9	3861.7	4000.2	4102.7	4072.2	4066.7	4075.0	3947.6	3955.9
40°	16103.3	12526.9	4147.0	3756.4	3867.2	3889.4	3803.5	3850.6	3892.1	3698.2	3703.7
42.5°	17524.3	13189.0	3917.0	3684.4	3756.4	3703.7	3570.8	3623.5	3617.9	3363.0	3360.3
45°	18973.2	13909.2	3836.8	3631.8	3653.9	3548.7	3401.9	3415.7	3299.4	3069.4	3077.7
47.5°	20413.7	14682.1	3886.6	3587.4	3526.5	3407.4	3293.7	3232.8	3061.1	2889.4	2889.4
50°	21826.6	15493.8	4069.5	3498.7	3352.0	3282.7	3199.6	3091.6	2908.7	2761.9	2750.8
52.5°	23136.8	16311.0	4274.5	3352.0	3133.1	3174.6	3122.0	2997.4	2817.3	2667.7	2670.5
55°	24377.9	17128.3	4354.8	3149.7	2928.1	3080.4	3050.0	2820.1	2604.0	2482.1	2471.1
57.5°	25729.8	18111.6	4266.2	2892.1	2761.9	2972.4	2856.1	2601.2	2476.6	2385.2	2376.9
60°	27602.4	19654.7	4075.0	2573.6	2604.0	2811.8	2612.3	2507.0	2371.3	2268.8	2263.3
62.5°	30713.4	22532.9	3767.5	2257.8	2418.4	2573.6	2496.0	2390.7	2252.2	2152.5	2152.5
65°	35311.9	26533.2	3188.5	2011.2	2210.6	2340.8	2371.3	2266.1	2122.0	2016.7	2022.2
67.5°	39190.3	29043.0	2412.8	1806.2	1997.3	2152.5	2238.3	2135.8	1983.5	1881.0	1883.7
70°	38976.9	27220.1	1842.2	1603.9	1808.9	1966.9	2077.7	1997.3	1833.9	1737.0	1745.3
72.5°	34619.4	22771.2	1490.4	1398.9	1617.8	1772.9	1905.9	1845.0	1678.7	1584.5	1584.5
75°	25433.3	16164.1	1191.2	1191.2	1379.5	1570.7	1717.5	1678.7	1526.4	1459.9	1440.5
77.5°	10720.7	6781.5	933.6	988.9	1146.9	1349.1	1532.0	1545.8	1412.9	1495.9	1357.4
80°	2850.5	1869.9	712.0	778.4	900.4	1113.7	1332.5	1327.0	1182.8	1105.4	1027.8
82.5°	1085.9	736.9	507.0	548.5	651.0	853.2	1055.4	1088.7	944.6	817.2	817.2
85°	418.3	315.8	313.0	329.6	379.6	565.1	797.9	825.5	712.0	603.9	623.3
87.5°	108.0	94.2	116.3	110.8	174.6	302.0	457.0	473.8	434.9	252.0	360.1
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)