

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: P966686

Luminaire Tested: **NAV-SB4C-735-U-T4FT**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P966686
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-24)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB4C-735-U-T4FT
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(4) 70 CRI, 3500K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV
FORWARD THROW OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 30407.6 lumens
Efficiency: N/A
Efficacy: 151.5 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B3 - U0 - G4

Input Watts (W): 200.7
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



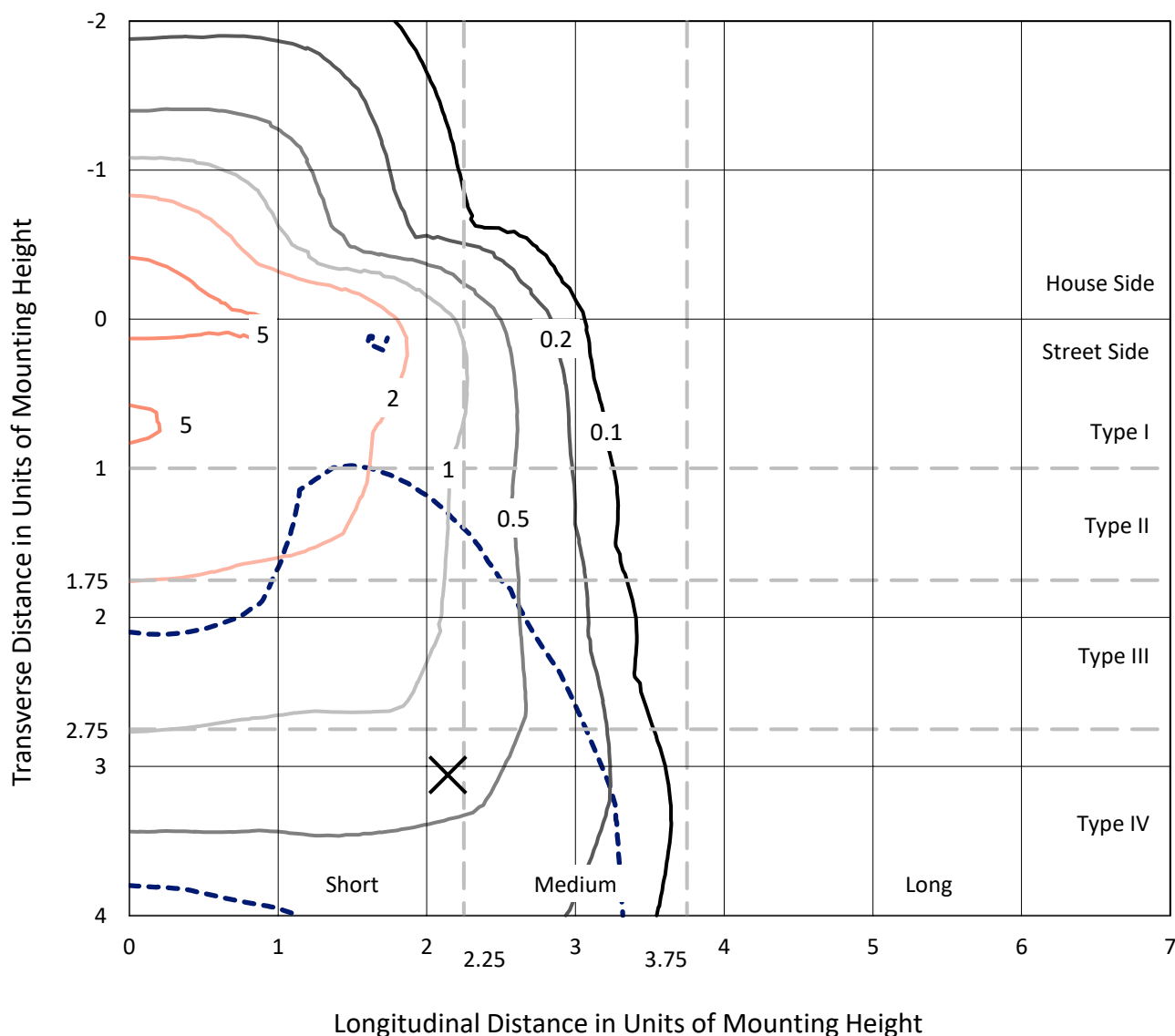
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

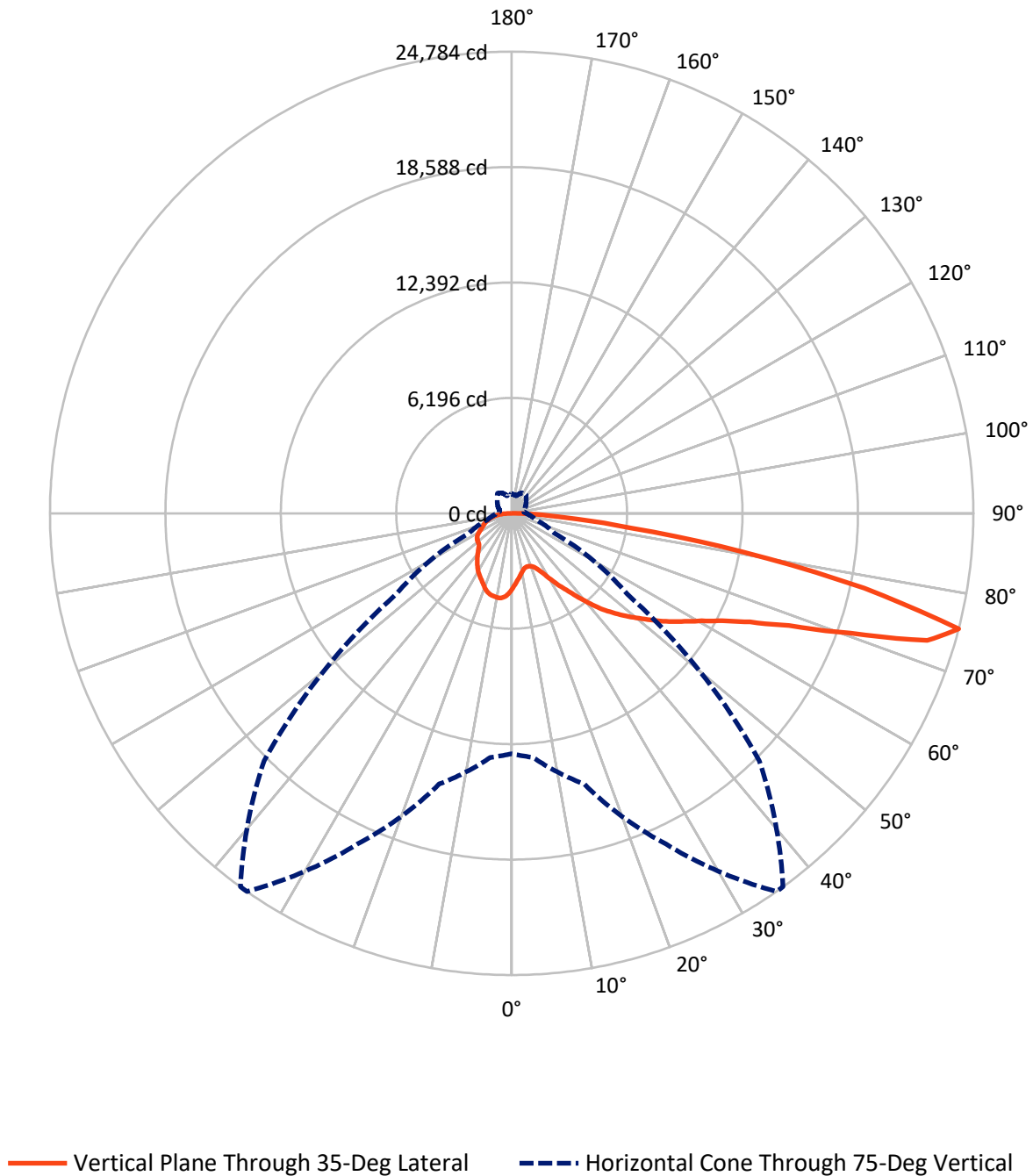


Based on 25 foot mounting height. Maximum calculated value = 7.2 fc

Type IV - Short - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	7236.3	0.0	7236.3
	% Fixture	23.8	0.0	23.8
Street Side	Lumens	23171.4	0.0	23171.4
	% Fixture	76.2	0.0	76.2
Total	Lumens	30407.6	0.0	30407.6
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	383.6	1.3
10°-20°	1106.6	3.6
20°-30°	1858.3	6.1
30°-40°	2888.0	9.5
40°-50°	4286.6	14.1
50°-60°	5917.9	19.5
60°-70°	7179.7	23.6
70°-80°	5933.5	19.5
80°-90°	853.4	2.8
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°	30407.6	100.0
0°-180°	30407.6	100.0

Coefficient of Utilization



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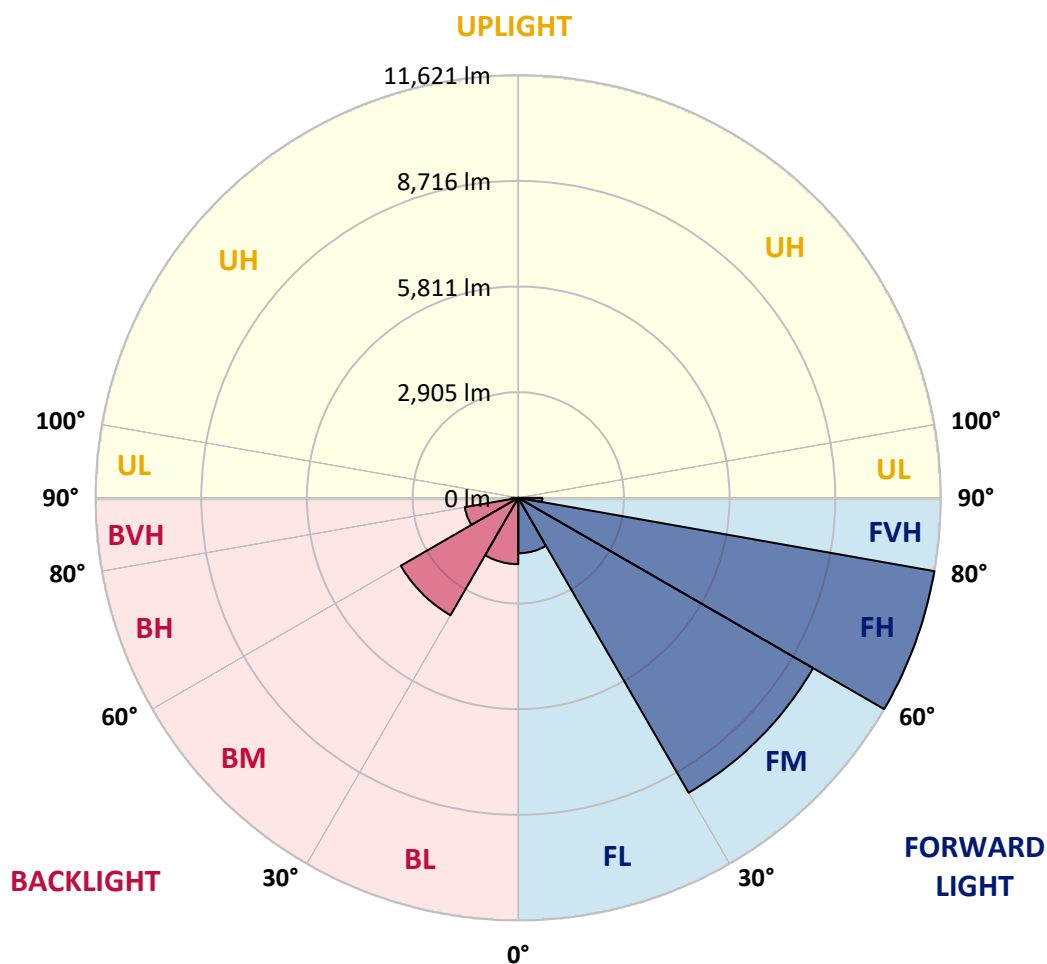
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1524.9	5.0			
FM	(30°-60°)	9363.9	30.8			
FH	(60°-80°)	11621.3	38.2			G4/12000
FVH	(80°-90°)	661.2	2.2			G4/750
BL	(0°-30°)	1823.6	6.0	B3/2500		
BM	(30°-60°)	3728.6	12.3	B3/5000		
BH	(60°-80°)	1491.9	4.9	B3/2500		G3/2500
BVH	(80°-90°)	192.2	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-G4

Type IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	36°	45°	55°	65°	75°	85°
0°	4052.0	4052.0	4052.0	4052.0	4052.0	4052.0	4052.0	4052.0	4052.0	4052.0	4052.0
2.5°	3736.4	3759.4	3769.3	3764.3	3789.0	3785.7	3820.3	3863.0	3922.2	3979.7	4063.5
5°	3448.7	3473.4	3494.7	3514.5	3562.2	3576.9	3631.2	3713.4	3821.9	3932.0	4070.1
7.5°	3180.8	3202.2	3235.0	3271.2	3351.7	3366.5	3456.9	3585.1	3736.4	3897.5	4088.2
10°	2962.1	2983.6	3018.0	3059.1	3159.5	3177.5	3292.6	3463.6	3660.8	3864.7	4107.9
12.5°	2868.5	2875.0	2894.8	2935.9	3023.0	3034.5	3161.1	3356.7	3586.8	3840.0	4137.5
15°	2863.5	2876.7	2878.3	2899.7	2972.0	2977.0	3093.7	3287.7	3540.8	3835.0	4181.9
17.5°	2912.8	2922.7	2907.9	2921.0	2981.9	2990.1	3082.2	3254.8	3526.0	3856.5	4257.5
20°	3044.4	3052.6	3008.2	2990.1	3034.5	3041.1	3131.5	3276.1	3540.8	3900.8	4361.1
22.5°	3323.8	3328.8	3220.2	3146.2	3149.5	3152.9	3231.7	3363.2	3598.4	3981.3	4492.6
25°	3759.4	3756.1	3583.5	3440.5	3358.3	3340.3	3392.9	3504.7	3695.3	4088.2	4661.9
27.5°	4269.0	4244.3	4071.7	3858.1	3678.8	3652.6	3641.1	3688.8	3833.4	4229.6	4869.0
30°	4844.4	4821.3	4635.6	4356.1	4107.9	4065.2	3956.7	3932.0	4038.9	4421.8	5156.7
32.5°	5475.5	5460.8	5238.9	4900.2	4568.2	4518.9	4336.4	4270.7	4354.5	4712.8	5557.8
35°	6004.9	5991.7	5807.6	5459.2	5053.1	4992.3	4806.5	4732.5	4775.3	5085.9	6082.1
37.5°	6483.2	6476.7	6318.8	6044.3	5625.2	5551.2	5342.4	5317.8	5309.5	5577.5	6718.3
40°	6927.1	6910.7	6746.2	6601.6	6290.9	6223.5	6039.4	6018.1	5955.6	6182.4	7438.3
42.5°	7418.5	7375.8	7137.5	7070.0	6986.3	6930.3	6820.2	6823.5	6685.5	6864.6	8201.0
45°	7819.6	7795.0	7550.0	7510.6	7601.0	7578.0	7673.4	7698.1	7430.1	7579.7	8993.3
47.5°	8250.3	8227.4	8020.2	7992.2	8237.2	8243.8	8580.8	8589.0	8156.6	8322.7	9787.3
50°	8781.3	8748.5	8543.0	8577.5	8852.0	8876.6	9493.0	9437.2	8825.7	9077.2	10574.7
52.5°	9131.4	9151.2	9106.8	9162.7	9537.4	9560.5	10390.6	10247.6	9488.1	9821.9	11347.4
55°	9389.5	9429.0	9567.0	9695.3	10260.8	10283.7	11237.2	11018.5	10037.2	10512.3	12073.9
57.5°	9721.6	9665.6	9923.7	10173.6	10947.8	11008.7	12060.8	11761.6	10523.8	11107.3	12571.9
60°	10198.2	10158.9	10359.4	10729.2	11717.2	11814.2	12931.9	12430.6	10880.5	11579.1	12668.9
62.5°	11164.8	11066.2	11097.5	11424.5	12687.0	12815.3	13915.0	13014.1	11058.0	11763.2	12149.5
65°	12609.8	12440.4	12282.7	12509.5	14053.1	14179.6	15024.6	13472.8	10992.2	11406.5	10770.3
67.5°	14429.4	14261.8	14067.8	14281.5	16065.1	16165.4	16393.8	13730.9	10474.5	10032.3	8332.5
70°	15930.3	15867.8	16099.6	16979.0	19278.7	19282.1	18149.5	13517.2	9055.9	7112.8	4821.3
72.5°	15731.4	15693.6	16915.0	19633.9	23329.1	23242.0	19811.4	11899.6	6100.2	3208.8	1806.6
75°	12905.7	13150.5	15042.6	19586.1	24783.9	24772.4	18793.8	7564.9	2523.2	1329.8	933.7
77.5°	6920.5	7308.5	9766.0	14460.7	19347.8	19638.8	13213.1	2646.5	1083.3	851.5	646.1
80°	2256.9	2595.6	3892.5	7362.7	12571.9	12517.7	5663.0	1038.9	741.4	603.3	447.1
82.5°	958.4	997.8	1739.1	3476.7	6452.0	6351.7	1803.3	596.8	521.1	412.6	276.1
85°	374.8	419.2	767.6	1607.6	2794.5	2733.7	651.0	295.9	333.7	269.6	164.4
87.5°	123.3	149.5	274.5	550.6	869.6	838.3	159.5	101.9	144.6	123.3	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°	4052.0	4052.0	4052.0	4052.0	4052.0	4052.0	4052.0	4052.0	4052.0	4052.0	4052.0
2.5°	4086.6	4112.8	4144.1	4190.1	4229.6	4262.5	4297.0	4318.3	4326.5	4351.2	4349.6
5°	4116.1	4173.7	4250.9	4326.5	4400.5	4444.9	4484.4	4504.1	4522.2	4535.3	4538.6
7.5°	4165.5	4239.4	4361.1	4459.7	4522.2	4558.3	4584.6	4578.1	4584.6	4587.9	4592.8
10°	4208.1	4311.8	4456.4	4550.1	4597.7	4599.4	4592.8	4569.9	4558.3	4559.9	4563.3
12.5°	4259.2	4374.2	4530.4	4609.3	4622.4	4586.3	4558.3	4518.9	4504.1	4497.5	4494.2
15°	4328.2	4459.7	4611.0	4640.5	4607.7	4561.7	4513.9	4449.8	4416.9	4390.7	4398.9
17.5°	4412.0	4556.6	4673.4	4652.1	4581.3	4505.7	4428.4	4331.4	4264.1	4236.1	4237.8
20°	4528.8	4658.6	4721.0	4627.4	4520.6	4405.4	4273.9	4155.6	4093.1	4065.2	4061.9
22.5°	4670.1	4795.1	4767.1	4584.6	4433.4	4249.2	4084.9	3997.8	3966.5	3946.9	3950.1
25°	4839.4	4946.2	4800.0	4522.2	4290.3	4042.2	3915.6	3887.6	3872.9	3858.1	3858.1
27.5°	5059.7	5117.2	4824.6	4430.2	4066.8	3821.9	3775.9	3780.8	3775.9	3751.2	3756.1
30°	5350.6	5339.1	4847.6	4280.5	3810.3	3623.0	3626.2	3647.7	3650.9	3634.4	3642.7
32.5°	5733.6	5616.9	4859.1	4086.6	3565.5	3448.7	3452.0	3475.1	3491.5	3463.6	3476.7
35°	6197.3	5940.8	4841.1	3843.2	3376.5	3282.7	3258.1	3264.6	3269.5	3243.3	3261.3
37.5°	6738.0	6304.1	4760.5	3573.7	3220.2	3120.0	3067.4	3023.0	2996.7	2972.0	2988.5
40°	7331.4	6700.2	4612.6	3310.6	3046.0	2947.4	2868.5	2784.6	2695.9	2663.0	2677.8
42.5°	7952.8	7107.9	4433.4	3059.1	2845.5	2764.9	2681.1	2559.4	2426.3	2358.9	2367.1
45°	8597.2	7525.4	4257.5	2811.0	2640.0	2605.4	2508.5	2362.2	2217.5	2132.0	2125.4
47.5°	9228.4	7920.0	3999.4	2561.1	2447.7	2485.4	2409.9	2275.1	2114.0	1979.2	1964.4
50°	9831.7	8289.8	3576.9	2307.9	2291.5	2449.3	2377.0	2183.0	1998.9	1826.2	1811.5
52.5°	10430.1	8589.0	3036.2	2077.8	2207.6	2439.4	2334.2	2120.5	1895.3	1714.5	1694.7
55°	10938.0	8743.5	2515.0	1880.6	2086.0	2355.6	2283.3	2046.5	1749.1	1556.7	1540.3
57.5°	11227.3	8618.6	2081.1	1686.5	1918.4	2217.5	2196.2	1888.8	1574.8	1426.8	1407.1
60°	11102.4	8112.3	1726.0	1517.2	1758.9	2067.9	2044.9	1732.6	1441.7	1302.0	1282.2
62.5°	10413.6	7147.3	1444.9	1369.3	1614.3	1915.0	1893.7	1612.6	1339.7	1204.9	1183.6
65°	9026.3	5814.2	1226.3	1246.0	1467.9	1730.9	1762.2	1512.3	1259.2	1127.7	1106.3
67.5°	6884.3	4211.5	1055.3	1139.2	1324.9	1550.1	1640.5	1440.0	1191.8	1066.8	1047.1
70°	3923.8	2391.7	910.7	1035.7	1198.3	1382.4	1546.8	1382.4	1119.4	1015.9	1002.8
72.5°	1487.7	1098.1	787.4	932.0	1076.7	1241.1	1443.3	1292.0	1035.7	958.4	945.2
75°	794.0	669.0	662.5	810.4	937.0	1103.0	1313.4	1203.2	973.1	1012.6	1045.5
77.5°	540.8	473.4	554.0	693.7	784.1	950.2	1175.4	1068.5	843.3	840.0	774.3
80°	374.8	335.4	450.4	558.9	606.6	798.9	1025.7	917.3	687.2	641.1	613.2
82.5°	225.2	218.6	337.0	417.5	429.1	616.4	849.8	769.3	562.2	489.8	493.1
85°	123.3	129.9	215.4	245.0	249.9	430.7	665.7	595.1	432.3	363.3	366.5
87.5°	34.5	44.4	78.9	97.0	120.0	223.6	396.2	353.4	217.0	151.2	151.2
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)