

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: P883429

Luminaire Tested: **NAV-SB3D-735-U-T3**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P883429
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-5)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB3D-735-U-T3
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 70 CRI, 3500K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 30543 lumens
Efficiency: N/A
Efficacy: 140.0 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1.5' x H: 0')
IES Classification: Type III - Short
BUG Rating: B3 - U0 - G4

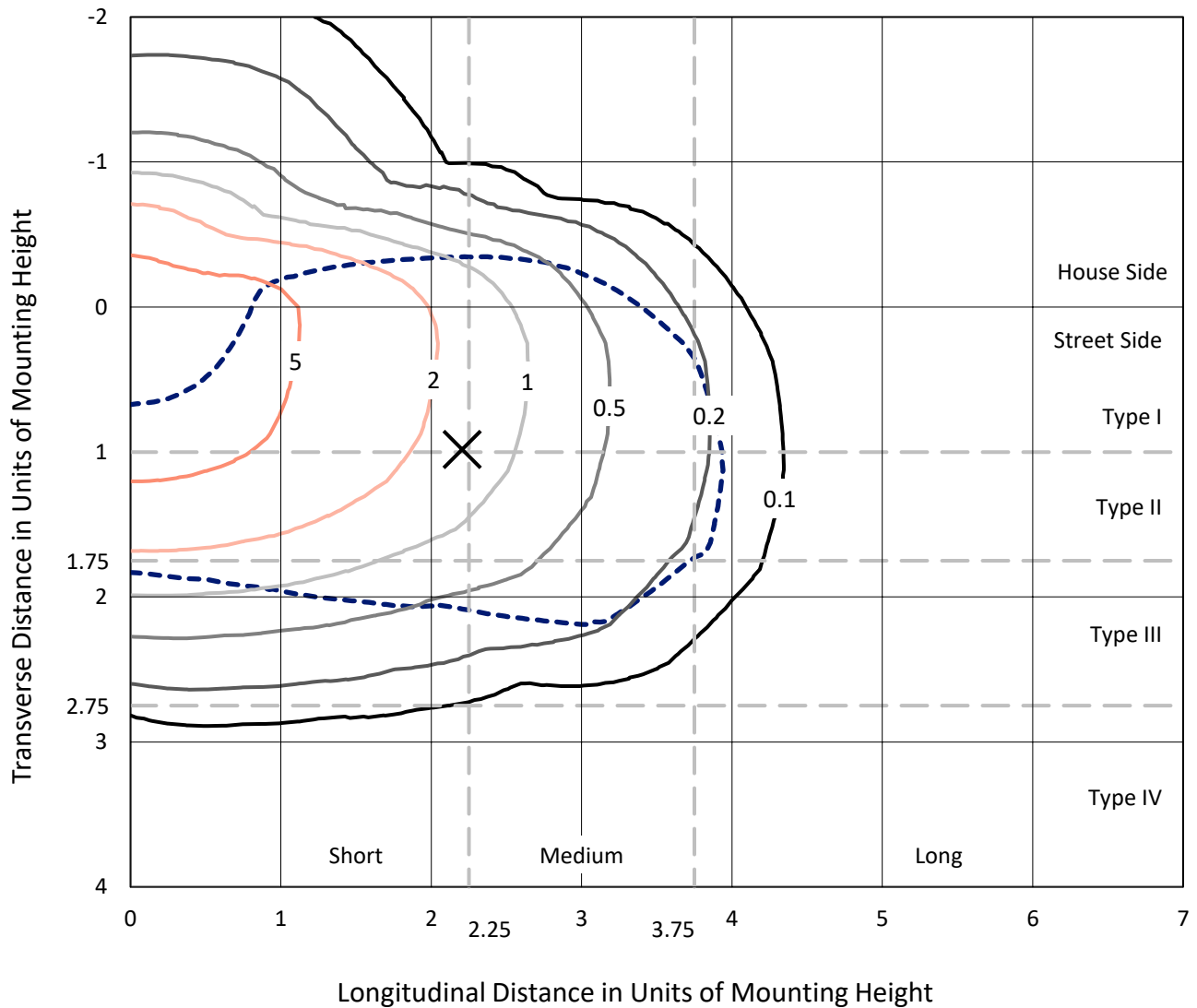
Input Watts (W): 218.1
Input Voltage (V): 120.0
Input Current (Ain): 1.84
Voltage Rise (V): NR
Power Factor: 0.998
Total Harmonic Distortion (THDi): 2.542
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

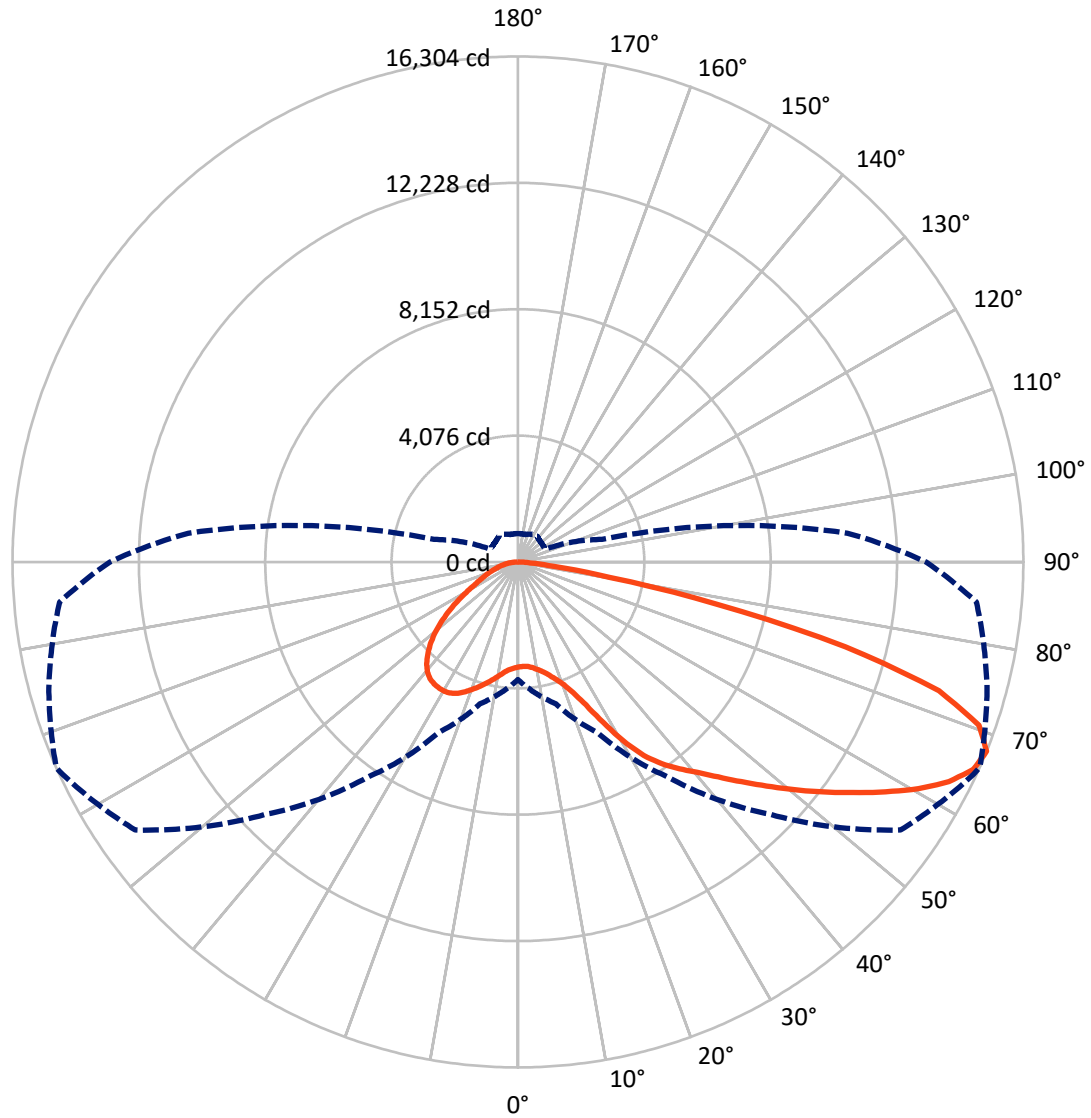
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.7 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 66-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	7594.4	0.0	7594.4
	% Fixture	24.9	0.0	24.9
Street Side	Lumens	22948.6	0.0	22948.6
	% Fixture	75.1	0.0	75.1
Total	Lumens	30543.0	0.0	30543.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	335.9	1.1
10°-20°	1109.7	3.6
20°-30°	2138.8	7.0
30°-40°	3750.1	12.3
40°-50°	5575.2	18.3
50°-60°	7067.2	23.1
60°-70°	6915.0	22.6
70°-80°	3298.6	10.8
80°-90°	352.5	1.2
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°	30543.0	100.0
0°-180°	30543.0	100.0

Coefficient of Utilization



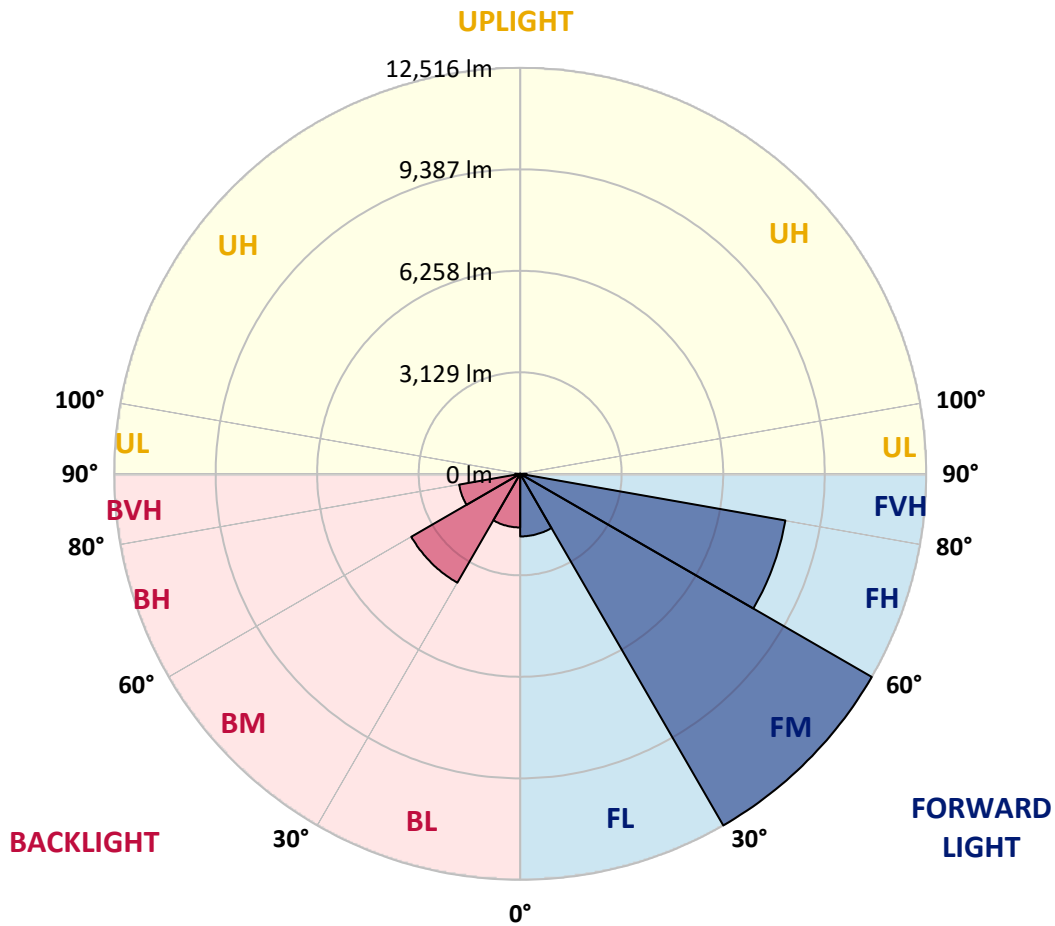
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1930.0	6.3			
FM (30°-60°)	12516.3	41.0			
FH (60°-80°)	8302.4	27.2			G4/12000
FVH (80°-90°)	199.9	0.7			G2/225
BL (0°-30°)	1654.3	5.4	B3/2500		
BM (30°-60°)	3876.3	12.7	B3/5000		
BH (60°-80°)	1911.2	6.3	B3/2500		G3/2500
BVH (80°-90°)	152.7	0.5			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 III Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	3387.6	3387.6	3387.6	3387.6	3387.6	3387.6	3387.6	3387.6	3387.6	3387.6	3387.6
2.5°	3352.3	3371.6	3366.8	3358.7	3357.1	3360.3	3365.2	3370.0	3368.4	3376.4	3389.2
5°	3342.7	3361.9	3360.3	3360.3	3366.8	3379.6	3387.6	3395.6	3387.6	3397.3	3414.9
7.5°	3349.1	3363.6	3370.0	3376.4	3392.4	3416.5	3435.8	3453.4	3443.8	3455.0	3477.5
10°	3431.0	3442.2	3448.6	3448.6	3459.8	3487.1	3506.4	3538.5	3530.4	3548.1	3577.0
12.5°	3580.2	3591.4	3591.4	3585.0	3593.0	3610.7	3617.1	3652.4	3638.0	3666.8	3695.7
15°	3763.1	3785.6	3767.9	3756.7	3759.9	3777.6	3776.0	3803.3	3788.8	3812.9	3838.6
17.5°	3965.3	3994.2	3965.3	3963.7	3957.3	3976.6	3978.2	4002.2	3976.6	3994.2	4011.9
20°	4204.4	4244.6	4220.5	4228.5	4214.1	4222.1	4230.1	4265.4	4225.3	4238.1	4233.3
22.5°	4541.4	4589.6	4563.9	4594.4	4584.8	4578.3	4576.7	4639.3	4576.7	4581.6	4535.0
25°	5032.5	5090.3	5045.3	5087.1	5087.1	5107.9	5132.0	5212.2	5107.9	5077.4	4957.1
27.5°	5757.8	5815.6	5727.3	5753.0	5745.0	5796.3	5770.7	5969.7	5857.3	5807.6	5565.3
30°	6630.8	6733.5	6566.6	6560.2	6552.2	6634.0	6670.9	6802.5	6688.6	6638.8	6346.8
32.5°	7574.4	7681.9	7482.9	7425.2	7394.7	7444.4	7413.9	7519.8	7441.2	7364.2	7003.1
35°	8572.6	8678.5	8489.1	8376.8	8254.8	8150.5	8041.4	8068.7	7994.9	7877.7	7503.8
37.5°	9516.2	9710.3	9509.7	9389.4	9164.7	8960.9	8656.0	8529.2	8460.2	8352.7	7975.6
40°	10477.4	10588.1	10435.7	10333.0	10089.0	9769.7	9281.9	9013.9	8920.8	8816.5	8497.1
42.5°	11185.1	11291.0	11209.2	11138.6	10947.6	10576.9	9946.2	9610.8	9476.0	9358.9	9087.7
45°	11746.8	11825.4	11774.0	11799.7	11717.9	11358.4	10634.7	10251.1	10111.5	9968.7	9755.3
47.5°	11973.0	12056.5	12138.3	12290.8	12430.4	12165.6	11374.5	10944.4	10796.7	10650.7	10440.5
50°	11947.3	12032.4	12269.9	12594.1	13027.3	12939.1	12154.4	11682.6	11546.2	11379.3	11185.1
52.5°	11741.9	11838.2	12143.1	12682.3	13372.4	13518.4	12948.7	12444.8	12316.4	12117.4	11923.3
55°	11202.7	11260.5	11717.9	12481.7	13454.2	13922.8	13727.0	13256.8	13128.4	12850.8	12639.0
57.5°	10203.0	10286.4	10952.4	11940.9	13248.8	14197.2	14410.6	14110.5	13987.0	13587.4	13365.9
60°	8898.3	9031.5	9793.8	11032.6	12725.6	14195.6	15031.7	14949.8	14847.1	14312.7	14081.7
62.5°	7422.0	7576.0	8309.4	9748.8	11810.9	13792.8	15420.0	15652.7	15599.8	14981.9	14686.7
65°	5700.1	5806.0	6536.1	8087.9	10387.5	12927.8	15465.0	16132.5	16142.2	15490.6	15002.8
67.5°	3795.2	4100.1	4734.0	6069.2	8481.1	11514.1	15070.2	16211.2	16304.2	15665.5	14843.9
70°	1851.9	2253.1	2874.1	3944.5	6069.2	9346.1	14038.3	15566.1	15773.1	15155.2	13897.1
72.5°	768.7	898.7	1237.3	1946.6	3483.9	6306.7	11965.0	13816.9	14200.4	13428.5	11684.2
75°	518.3	561.7	707.7	998.2	1587.1	3110.0	8628.7	10302.5	10920.3	10142.0	8290.1
77.5°	399.6	426.9	515.1	698.1	943.6	1176.3	4618.5	6208.8	6528.1	6043.5	4313.6
80°	314.5	335.4	385.1	508.7	669.2	629.1	1574.3	2813.1	2997.7	2514.6	1386.5
82.5°	272.8	280.8	276.0	345.0	444.5	367.5	516.7	1038.3	1145.8	831.3	452.5
85°	197.4	219.9	229.5	213.4	235.9	186.2	211.8	367.5	404.4	361.1	255.2
87.5°	80.2	118.8	146.0	138.0	86.7	53.0	65.8	107.5	123.6	134.8	83.4
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°	3387.6	3387.6	3387.6	3387.6	3387.6	3387.6	3387.6	3387.6	3387.6	3387.6	3387.6
2.5°	3390.8	3402.1	3410.1	3419.7	3426.1	3435.8	3455.0	3466.3	3467.9	3475.9	3474.3
5°	3421.3	3437.4	3455.0	3480.7	3509.6	3533.7	3570.6	3596.2	3605.9	3613.9	3612.3
7.5°	3487.1	3509.6	3541.7	3586.6	3628.3	3660.4	3705.4	3735.9	3766.3	3777.6	3779.2
10°	3585.0	3617.1	3663.6	3724.6	3769.6	3811.3	3857.8	3883.5	3914.0	3926.8	3933.2
12.5°	3707.0	3740.7	3801.6	3886.7	3928.4	3957.3	3973.4	3966.9	3973.4	3984.6	3987.8
15°	3846.6	3883.5	3952.5	4044.0	4072.8	4047.2	4011.9	3979.8	3975.0	3978.2	3989.4
17.5°	4011.9	4039.1	4119.4	4196.4	4175.6	4069.6	3992.6	3941.3	3915.6	3907.6	3918.8
20°	4243.0	4243.0	4308.7	4356.9	4217.3	4037.5	3917.2	3833.7	3780.8	3758.3	3753.5
22.5°	4523.8	4498.1	4539.8	4506.1	4209.3	3947.7	3780.8	3636.4	3556.1	3524.0	3519.2
25°	4880.0	4849.5	4838.3	4629.7	4151.5	3804.9	3533.7	3358.7	3288.1	3270.5	3273.7
27.5°	5417.6	5340.6	5194.6	4697.1	4045.6	3580.2	3244.8	3082.7	3042.6	3044.2	3049.0
30°	6133.3	5979.3	5621.4	4708.3	3872.3	3262.5	2949.5	2834.0	2814.7	2822.8	2850.0
32.5°	6796.1	6650.1	6057.9	4657.0	3605.9	2951.1	2684.7	2607.7	2578.8	2588.5	2601.3
35°	7316.0	7275.9	6462.3	4584.8	3278.5	2659.1	2447.2	2381.4	2325.3	2312.4	2322.1
37.5°	7807.1	7791.0	6765.6	4483.7	2954.3	2452.1	2256.3	2169.6	2087.8	2042.8	2044.4
40°	8346.3	8330.2	6964.6	4328.0	2667.1	2272.3	2084.6	1970.6	1869.5	1787.7	1795.7
42.5°	8952.9	8858.2	7059.3	4104.9	2423.2	2119.9	1945.0	1790.9	1657.7	1582.3	1587.1
45°	9615.6	9402.2	7057.7	3820.9	2217.8	1980.3	1795.7	1577.5	1453.9	1383.3	1380.1
47.5°	10318.5	9922.2	6971.0	3506.4	2018.8	1826.2	1564.6	1397.7	1315.9	1272.6	1262.9
50°	11043.9	10408.4	6823.4	3145.3	1815.0	1651.3	1420.2	1306.3	1243.7	1203.6	1189.1
52.5°	11725.9	10849.7	6645.3	2736.1	1608.0	1481.2	1356.0	1267.8	1202.0	1157.0	1137.8
55°	12359.8	11230.0	6393.3	2317.3	1439.5	1367.2	1325.5	1251.7	1176.3	1123.3	1102.5
57.5°	12923.0	11477.2	5958.4	1924.1	1319.1	1288.6	1293.4	1224.4	1137.8	1092.8	1063.9
60°	13391.6	11658.5	5314.9	1559.8	1221.2	1211.6	1243.7	1173.1	1072.0	1020.6	998.2
62.5°	13672.5	11655.3	4525.4	1277.4	1137.8	1141.0	1177.9	1108.9	1006.2	958.0	943.6
65°	13648.4	11369.6	3658.8	1092.8	1057.5	1060.7	1108.9	1038.3	951.6	922.7	921.1
67.5°	13165.3	10673.2	2806.7	972.5	969.3	983.7	1039.9	990.1	917.9	914.7	919.5
70°	11857.5	9227.3	2022.0	876.2	877.8	898.7	972.5	959.6	900.3	906.7	905.1
72.5°	9508.1	7035.2	1357.6	775.1	776.7	810.4	908.3	935.6	882.6	967.7	980.5
75°	6332.3	4387.4	873.0	667.6	669.2	712.5	852.1	889.0	834.5	964.5	972.5
77.5°	3042.6	1972.2	632.3	561.7	561.7	601.8	736.6	796.0	710.9	749.4	686.8
80°	1051.1	741.4	497.5	452.5	442.9	470.2	621.0	690.0	613.0	564.9	529.6
82.5°	414.0	385.1	399.6	351.4	319.3	337.0	483.0	569.7	450.9	407.6	406.0
85°	237.5	250.3	282.4	232.7	184.5	207.0	354.6	409.2	340.2	300.1	306.5
87.5°	64.2	88.3	130.0	120.4	83.4	88.3	168.5	226.3	195.8	150.8	155.7
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)