

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: P883954

Luminaire Tested: **NAV-SB4C-750-U-SL4**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P883954
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-9)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB4C-750-U-SL4
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(4) 70 CRI, 5000K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV SPILL
LIGHT ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 32436 lumens
Efficiency: N/A
Efficacy: 161.6 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type IV - Medium
BUG Rating: B4 - U0 - G5

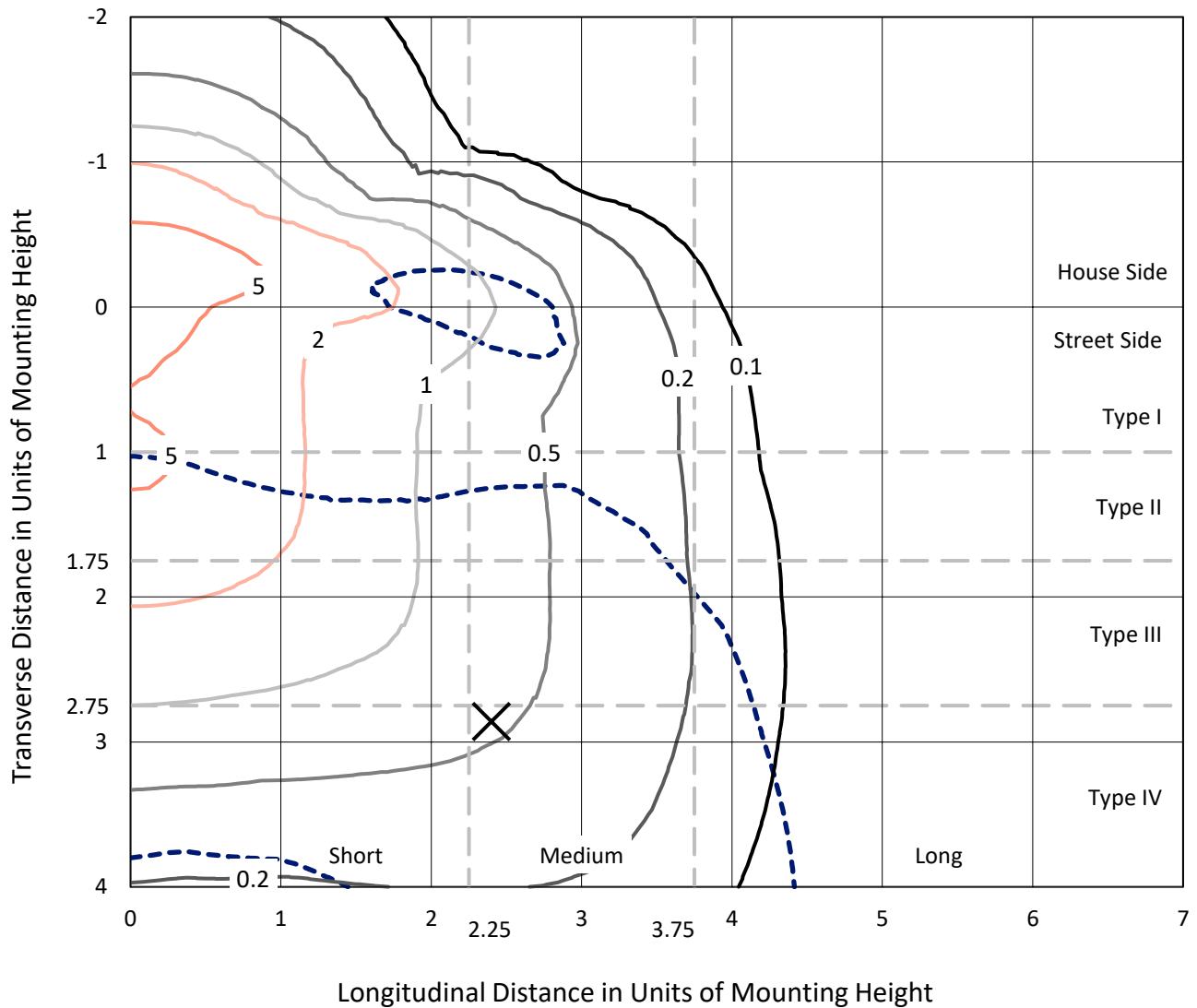
Input Watts (W): 200.7
Input Voltage (V): 120.0
Input Current (Ain): 1.714
Voltage Rise (V): NR
Power Factor: 0.994
Total Harmonic Distortion (THDi): 9.472
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

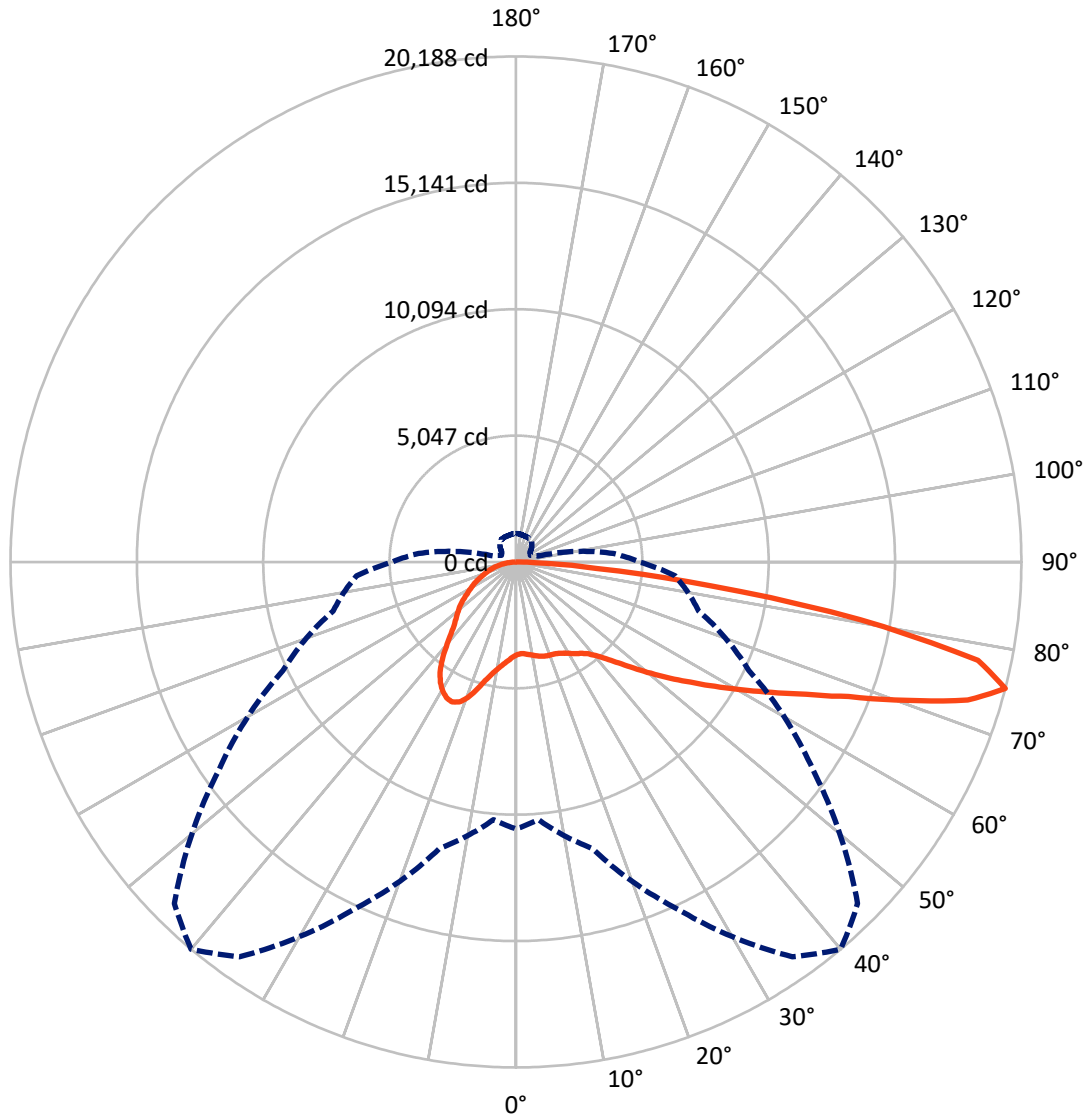
× Max cd
 - - - 1/2 Max cd



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

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Luminous Intensity Polar Plot



— Vertical Plane Through 40-Deg Lateral - - - Horizontal Cone Through 75-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	10049.8	0.0	10049.8
	% Fixture	31.0	0.0	31.0
Street Side	Lumens	22386.2	0.0	22386.2
	% Fixture	69.0	0.0	69.0
Total	Lumens	32436.0	0.0	32436.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	370.2	1.1
10°-20°	1243.1	3.8
20°-30°	2269.7	7.0
30°-40°	3219.1	9.9
40°-50°	4346.8	13.4
50°-60°	5847.5	18.0
60°-70°	7421.9	22.9
70°-80°	6735.8	20.8
80°-90°	981.9	3.0
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°	32436.0	100.0
0°-180°	32436.0	100.0

Coefficient of Utilization



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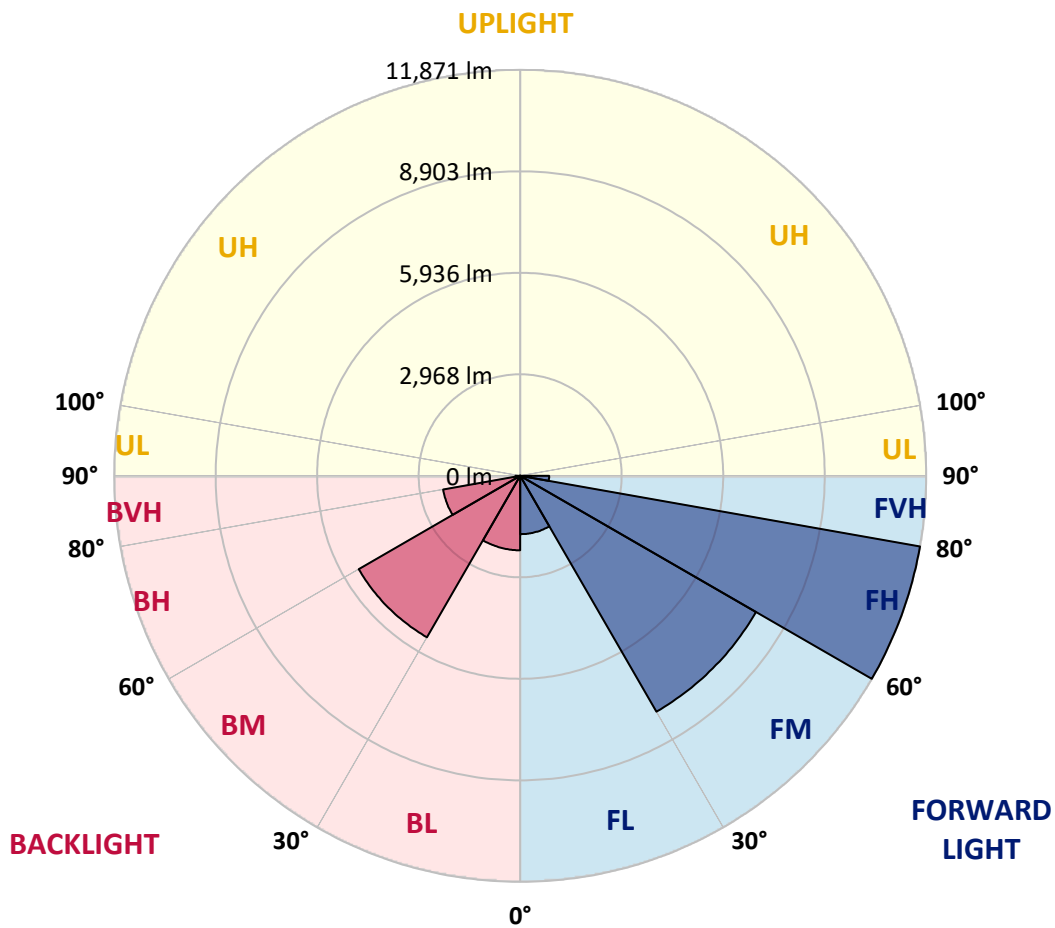
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1706.2	5.3			
FM (30°-60°)	7962.3	24.5			
FH (60°-80°)	11871.1	36.6			G4/12000
FVH (80°-90°)	846.7	2.6			G5
BL (0°-30°)	2176.9	6.7	B3/2500		
BM (30°-60°)	5451.1	16.8	B4/8500		
BH (60°-80°)	2286.6	7.0	B3/2500		G3/2500
BVH (80°-90°)	135.2	0.4			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G5

Type IV Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	40°	45°	55°	65°	75°	85°
0°	3709.1	3709.1	3709.1	3709.1	3709.1	3709.1	3709.1	3709.1	3709.1	3709.1	3709.1
2.5°	3652.3	3673.0	3667.8	3660.9	3660.9	3662.7	3660.9	3673.0	3685.0	3697.1	3716.0
5°	3690.2	3710.8	3700.5	3691.9	3685.0	3683.3	3678.1	3676.4	3683.3	3698.8	3724.6
7.5°	3764.2	3784.8	3769.3	3753.8	3740.1	3733.2	3726.3	3716.0	3710.8	3719.4	3755.5
10°	3846.7	3867.4	3848.4	3820.9	3798.6	3790.0	3783.1	3772.8	3765.9	3771.0	3810.6
12.5°	3929.3	3950.0	3924.1	3886.3	3857.1	3851.9	3843.3	3839.8	3838.1	3836.4	3876.0
15°	4006.7	4023.9	3991.2	3946.5	3915.5	3906.9	3898.3	3903.5	3912.1	3922.4	3967.2
17.5°	4066.9	4084.1	4036.0	3977.5	3948.2	3944.8	3939.6	3956.8	3980.9	4006.7	4061.8
20°	4122.0	4139.2	4077.3	3998.1	3963.7	3963.7	3965.4	4001.6	4036.0	4073.8	4149.5
22.5°	4199.4	4213.2	4137.5	4029.1	3979.2	3982.6	3996.4	4032.5	4075.5	4127.1	4232.1
25°	4314.7	4325.0	4232.1	4087.6	4030.8	4041.1	4053.2	4070.4	4111.7	4171.9	4312.9
27.5°	4500.5	4509.1	4386.9	4190.8	4104.8	4122.0	4139.2	4127.1	4146.1	4197.7	4378.3
30°	4762.0	4767.1	4612.3	4352.5	4230.4	4239.0	4242.4	4192.5	4156.4	4197.7	4424.8
32.5°	5071.6	5069.9	4885.8	4548.6	4373.2	4364.6	4335.3	4237.3	4153.0	4189.1	4466.1
35°	5551.6	5532.7	5295.3	4823.9	4534.9	4481.5	4412.7	4287.1	4170.2	4180.5	4502.2
37.5°	6346.4	6287.9	5959.3	5274.6	4775.7	4639.8	4538.3	4368.0	4208.0	4177.0	4545.2
40°	7242.7	7168.7	6807.5	5892.2	5137.0	4918.5	4755.1	4483.3	4269.9	4192.5	4608.8
42.5°	8305.9	8201.0	7812.2	6620.0	5594.6	5278.1	5032.1	4629.5	4361.1	4242.4	4694.9
45°	9611.7	9472.3	8921.8	7440.6	6170.9	5749.4	5420.9	4851.4	4500.5	4338.8	4823.9
47.5°	10931.2	10965.6	10182.8	8379.9	6862.5	6330.9	5907.7	5185.2	4703.5	4493.6	5032.1
50°	12333.3	12357.4	11437.0	9420.7	7647.0	6988.1	6454.8	5558.5	4985.6	4713.8	5343.4
52.5°	13427.4	13430.9	12575.8	10509.7	8464.2	7710.7	7044.9	5985.1	5312.5	5006.3	5758.1
55°	14112.1	14103.5	13374.1	11540.2	9403.5	8469.3	7698.6	6470.3	5711.6	5350.3	6279.3
57.5°	14609.3	14583.5	13924.6	12426.2	10404.7	9365.6	8438.4	7020.8	6183.0	5759.8	6965.7
60°	14798.6	14783.1	14297.9	13191.7	11457.6	10356.6	9291.7	7636.7	6718.0	6243.2	7848.3
62.5°	14870.8	14900.1	14664.4	13933.2	12584.4	11454.2	10229.3	8373.0	7320.1	6790.3	8779.0
65°	15125.4	15178.8	15130.6	14903.5	13857.5	12739.3	11473.1	9248.7	7977.3	7376.9	9751.0
67.5°	15629.5	15682.8	15703.5	16064.7	15412.7	14340.9	13024.9	10339.4	8746.3	7985.9	10482.2
70°	15617.4	15602.0	15966.7	16988.6	17360.2	16558.5	15116.8	11681.3	9663.3	8491.7	10575.1
72.5°	14215.3	14091.5	14953.4	16978.2	18980.8	18874.1	17671.6	13411.9	10454.6	8553.6	9176.4
75°	10664.5	10334.2	11856.7	15300.9	19250.8	20188.4	19295.6	14485.4	10267.1	7557.5	6386.0
77.5°	4560.7	4228.6	6023.0	11326.9	17229.4	18872.4	17805.7	12637.8	8195.8	4997.7	3136.2
80°	1193.9	1192.2	1820.1	5135.3	11717.4	13936.7	12226.6	8161.4	4682.8	1785.7	865.3
82.5°	493.7	481.7	669.2	1997.3	5725.4	7820.8	6382.5	3640.3	1691.1	483.4	287.3
85°	184.1	182.4	325.1	689.9	2019.7	3225.7	2334.5	930.7	421.5	235.7	129.0
87.5°	51.6	49.9	70.5	239.1	492.0	746.6	399.1	153.1	118.7	92.9	37.8
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°	3709.1	3709.1	3709.1	3709.1	3709.1	3709.1	3709.1	3709.1	3709.1	3709.1	3709.1
2.5°	3721.1	3729.7	3745.2	3757.3	3772.8	3790.0	3814.0	3829.5	3845.0	3855.3	3848.4
5°	3736.6	3755.5	3795.1	3834.7	3881.1	3924.1	3974.0	4010.2	4039.4	4048.0	4051.5
7.5°	3771.0	3802.0	3869.1	3936.2	4010.2	4080.7	4153.0	4214.9	4264.8	4283.7	4285.4
10°	3831.2	3872.5	3967.2	4061.8	4159.8	4268.2	4361.1	4450.6	4521.1	4550.4	4552.1
12.5°	3906.9	3958.6	4082.4	4213.2	4349.1	4498.7	4619.2	4729.3	4817.0	4856.6	4856.6
15°	4005.0	4072.1	4230.4	4405.8	4605.4	4813.6	4966.7	5088.8	5186.9	5235.1	5231.6
17.5°	4111.7	4201.1	4400.7	4665.6	4951.2	5224.7	5403.7	5493.1	5594.6	5641.1	5639.3
20°	4214.9	4325.0	4610.6	4995.9	5376.1	5666.9	5811.4	5835.5	5842.3	5847.5	5861.3
22.5°	4321.5	4469.5	4873.8	5412.3	5820.0	6021.3	6041.9	5938.7	5794.2	5727.1	5746.0
25°	4438.5	4634.7	5217.9	5871.6	6201.9	6226.0	6067.7	5816.5	5543.0	5417.4	5436.3
27.5°	4552.1	4825.6	5630.7	6310.3	6477.2	6265.6	5924.9	5568.8	5238.5	5106.0	5121.5
30°	4665.6	5044.1	6086.6	6693.9	6602.7	6167.5	5699.6	5302.2	4970.1	4830.8	4846.3
32.5°	4780.9	5298.7	6611.4	6970.9	6580.4	5959.3	5419.1	5002.8	4710.4	4564.1	4583.0
35°	4911.6	5611.8	7108.5	7122.3	6430.7	5653.1	5049.3	4645.0	4390.4	4273.4	4299.2
37.5°	5081.9	6009.2	7547.2	7160.1	6169.2	5204.1	4589.9	4221.8	4011.9	3958.6	3996.4
40°	5293.6	6487.5	7882.7	7099.9	5782.1	4658.7	4087.6	3793.4	3674.7	3686.7	3728.0
42.5°	5568.8	7022.5	8118.4	6945.1	5243.7	4096.2	3647.2	3516.4	3573.2	3621.4	3666.1
45°	5926.6	7578.2	8264.6	6681.9	4634.7	3619.6	3387.4	3418.4	3461.4	3466.5	3500.9
47.5°	6384.3	8140.8	8361.0	6284.5	4013.6	3284.2	3222.2	3229.1	3220.5	3184.4	3211.9
50°	6955.4	8687.8	8447.0	5758.1	3485.5	3074.3	2991.7	2967.6	2848.9	2731.9	2747.4
52.5°	7605.7	9190.2	8483.1	5104.3	3074.3	2898.8	2764.6	2613.2	2391.3	2355.2	2367.2
55°	8328.3	9654.7	8390.2	4300.9	2728.5	2673.4	2470.4	2288.1	2264.0	2233.0	2238.2
57.5°	9191.9	10155.3	8201.0	3404.6	2374.1	2410.2	2212.4	2233.0	2190.0	2141.9	2133.2
60°	10136.4	10673.1	7868.9	2587.4	2007.7	2081.6	2145.3	2143.6	2131.5	2092.0	2078.2
62.5°	10986.2	11013.8	7215.2	1981.9	1686.0	1827.0	2000.8	1999.1	1988.7	1966.4	1957.8
65°	11492.0	10962.1	6124.5	1560.4	1421.0	1617.1	1804.7	1818.4	1820.1	1818.4	1818.4
67.5°	11402.6	10358.3	4627.8	1242.1	1202.5	1403.8	1610.3	1629.2	1642.9	1646.4	1649.8
70°	10391.0	9031.9	3017.5	990.9	1008.1	1216.3	1426.2	1445.1	1457.1	1470.9	1477.8
72.5°	8099.5	6640.6	1727.2	801.7	837.8	1054.6	1243.8	1266.2	1273.1	1298.9	1309.2
75°	4935.7	3905.2	932.4	631.4	688.1	901.5	1063.2	1089.0	1101.0	1132.0	1135.4
77.5°	2346.6	1691.1	531.6	492.0	554.0	736.3	898.0	927.3	894.6	911.8	898.0
80°	793.1	627.9	335.5	375.0	423.2	574.6	719.1	748.4	679.5	676.1	669.2
82.5°	277.0	254.6	213.3	249.5	273.5	411.2	543.6	581.5	505.8	504.1	480.0
85°	108.4	103.2	118.7	135.9	163.4	252.9	357.8	376.8	311.4	251.2	247.7
87.5°	22.4	24.1	29.2	31.0	49.9	87.7	129.0	158.3	125.6	106.7	98.1
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)