

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: P883914

Luminaire Tested: **NAV-SB4C-727-U-SL4**

Issue Date: 10/7/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P883914  
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-727-U-SL4  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(4) 70 CRI, 2700K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV SPILL  
LIGHT ELIMINATOR OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

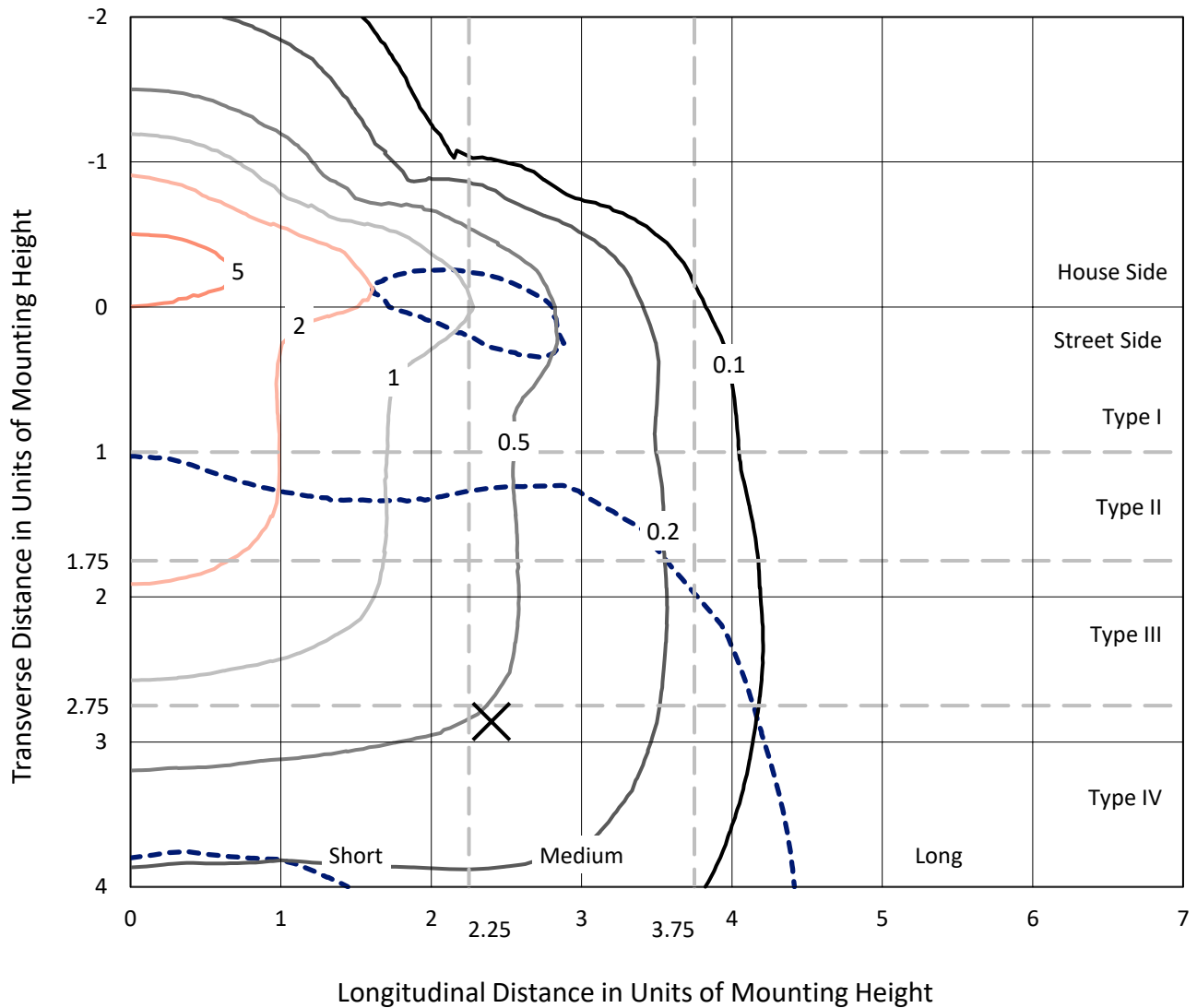
Lumens per Lamp: N/A  
Luminaire Lumens: 27265 lumens  
Efficiency: N/A  
Efficacy: 135.8 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type IV - Medium  
BUG Rating: B3 - U0 - G4  
  
Input Watts (W): 200.7  
Input Voltage (V): 120.0  
Input Current (Ain): 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



REPORT NUMBER: P883914  
 CATALOG NUMBER: NAV-SB4C-727-U-SL4

### Iso-Footcandle Lines of Horizontal Illumination

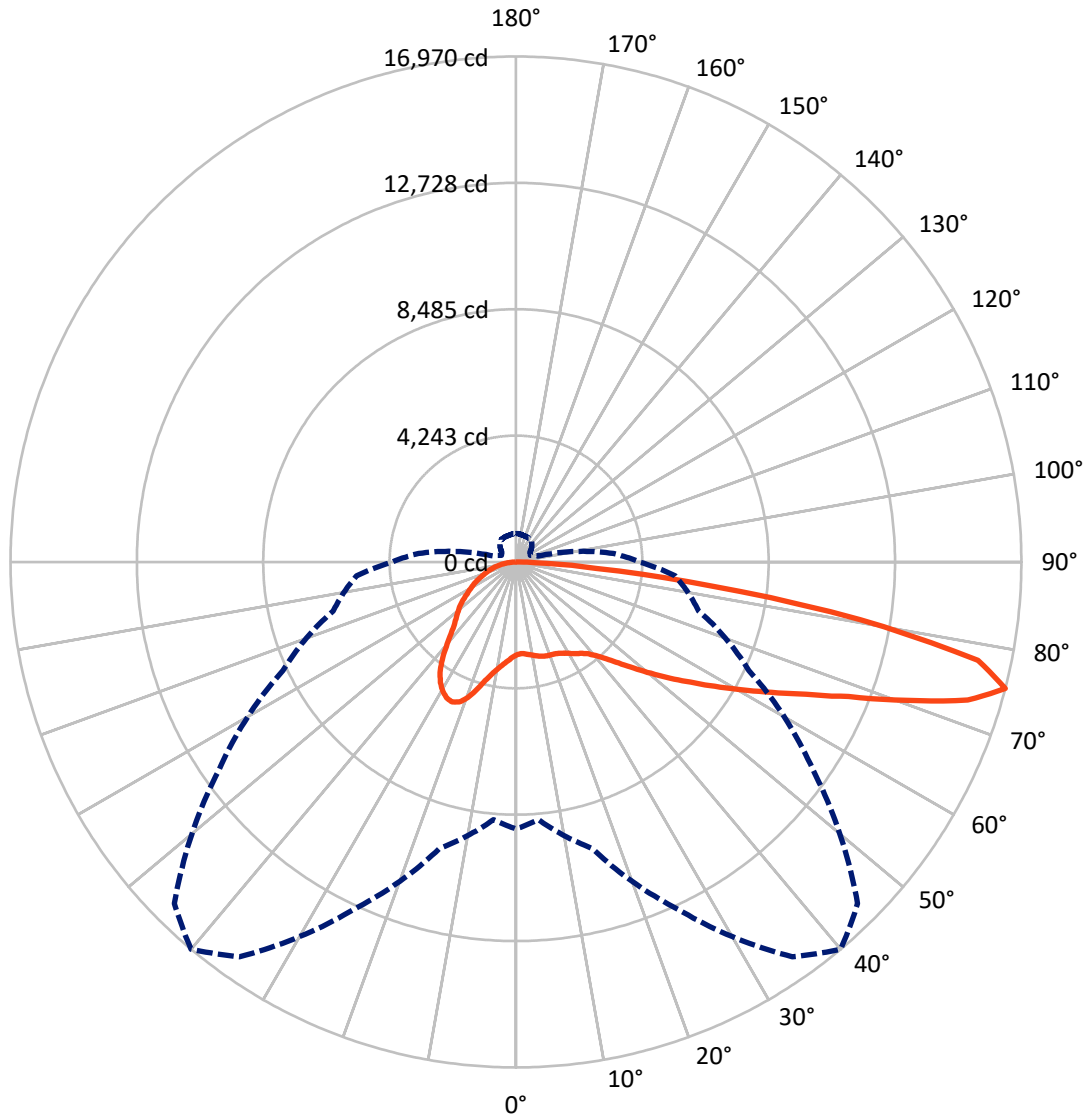
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.4 fc  
 Type IV - Medium - N/A

REPORT NUMBER: P883914  
CATALOG NUMBER: NAV-SB4C-727-U-SL4

### Luminous Intensity Polar Plot



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

REPORT NUMBER: P883914  
 CATALOG NUMBER: NAV-SB4C-727-U-SL4

**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	8447.6	0.0	8447.6
	% Fixture	31.0	0.0	31.0
<b>Street Side</b>	Lumens	18817.4	0.0	18817.4
	% Fixture	69.0	0.0	69.0
<b>Total</b>	Lumens	27265.0	0.0	27265.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	311.2	1.1
10°-20°	1044.9	3.8
20°-30°	1907.9	7.0
30°-40°	2705.9	9.9
40°-50°	3653.8	13.4
50°-60°	4915.3	18.0
60°-70°	6238.7	22.9
70°-80°	5662.0	20.8
80°-90°	825.3	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°	27265.0	100.0
0°-180°	27265.0	100.0



REPORT NUMBER: P883914

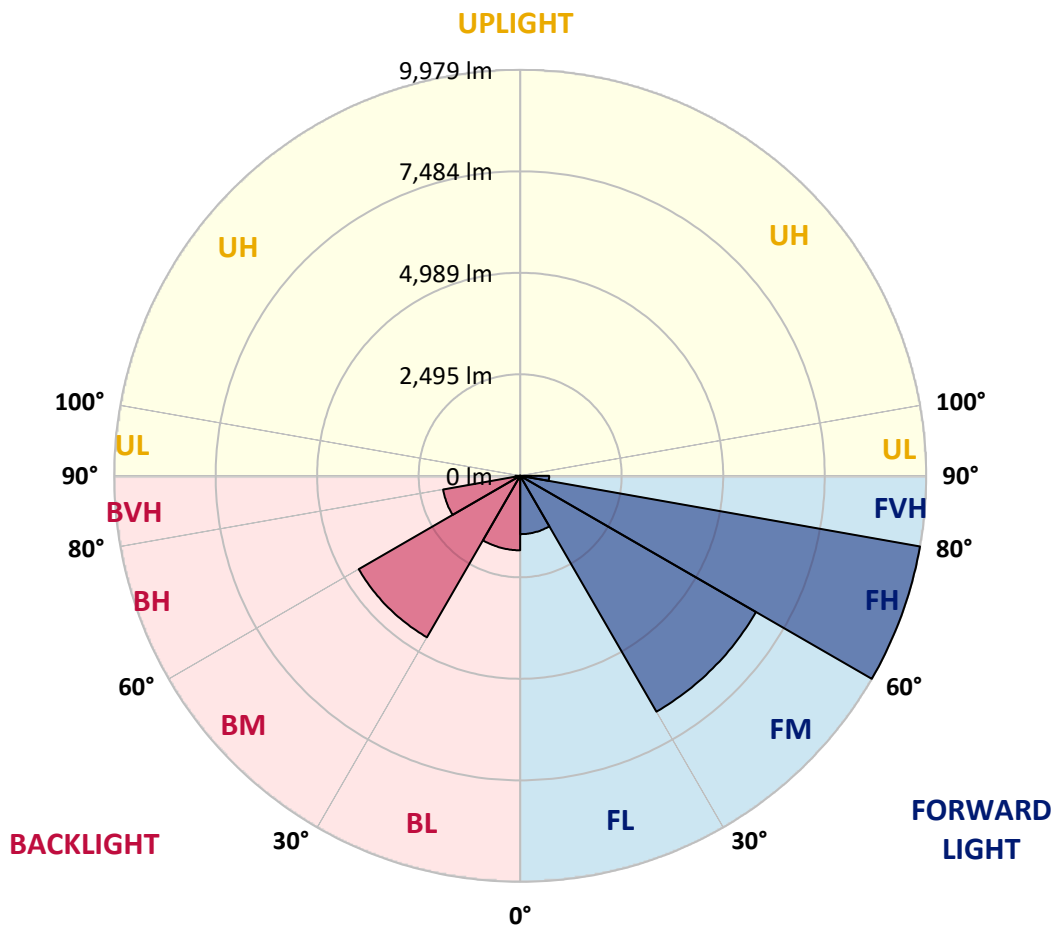
CATALOG NUMBER: NAV-SB4C-727-U-SL4

**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1434.2	5.3			
FM (30°-60°)	6692.9	24.5			
FH (60°-80°)	9978.6	36.6			G4/12000
FVH (80°-90°)	711.7	2.6			G4/750
BL (0°-30°)	1829.8	6.7	B3/2500		
BM (30°-60°)	4582.1	16.8	B3/5000		
BH (60°-80°)	1922.1	7.0	B3/2500		G3/2500
BVH (80°-90°)	113.6	0.4			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 Medium



REPORT NUMBER: P883914

CATALOG NUMBER: NAV-SB4C-727-U-SL4

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	40°	45°	55°	65°	75°	85°
0°	3117.8	3117.8	3117.8	3117.8	3117.8	3117.8	3117.8	3117.8	3117.8	3117.8	3117.8
2.5°	3070.1	3087.4	3083.1	3077.3	3077.3	3077.3	3077.3	3087.4	3097.5	3107.7	3123.6
5°	3101.9	3119.2	3110.6	3103.3	3097.5	3097.5	3091.8	3090.3	3096.1	3109.1	3130.8
7.5°	3164.1	3181.4	3168.4	3155.4	3143.8	3143.8	3132.3	3123.6	3119.2	3126.5	3156.8
10°	3233.5	3250.8	3234.9	3211.8	3193.0	3193.0	3180.0	3171.3	3165.5	3169.8	3203.1
12.5°	3302.9	3320.2	3298.6	3266.7	3242.2	3242.2	3230.6	3227.7	3226.2	3224.8	3258.1
15°	3368.0	3382.4	3354.9	3317.4	3291.3	3291.3	3276.9	3281.2	3288.4	3297.1	3334.7
17.5°	3418.6	3433.0	3392.5	3343.4	3318.8	3318.8	3311.6	3326.0	3346.3	3368.0	3414.2
20°	3464.9	3479.3	3427.3	3360.7	3331.8	3331.8	3333.3	3363.6	3392.5	3424.4	3488.0
22.5°	3529.9	3541.5	3477.9	3386.8	3344.8	3344.8	3359.3	3389.7	3425.8	3469.2	3557.4
25°	3626.8	3635.5	3557.4	3435.9	3388.2	3388.2	3407.0	3421.5	3456.2	3506.8	3625.4
27.5°	3783.0	3790.2	3687.6	3522.7	3450.4	3450.4	3479.3	3469.2	3485.1	3528.5	3680.3
30°	4002.8	4007.1	3877.0	3658.6	3556.0	3556.0	3566.1	3524.1	3493.8	3528.5	3719.4
32.5°	4263.1	4261.7	4106.9	3823.5	3676.0	3676.0	3644.2	3561.7	3490.9	3521.3	3754.1
35°	4666.6	4650.7	4451.1	4054.9	3811.9	3811.9	3709.2	3603.7	3505.3	3514.0	3784.4
37.5°	5334.7	5285.5	5009.3	4433.7	4014.4	4014.4	3814.8	3671.6	3537.2	3511.1	3820.6
40°	6088.1	6025.9	5722.2	4952.9	4318.1	4318.1	3997.0	3768.5	3589.2	3524.1	3874.1
42.5°	6981.8	6893.6	6566.7	5564.6	4702.7	4702.7	4229.8	3891.5	3665.9	3566.1	3946.4
45°	8079.4	7962.2	7499.5	6254.4	5187.2	5187.2	4556.7	4078.0	3783.0	3647.1	4054.9
47.5°	9188.5	9217.4	8559.5	7043.9	5768.5	5768.5	4965.9	4358.5	3953.6	3777.2	4229.8
50°	10367.1	10387.3	9613.7	7918.8	6427.9	6427.9	5425.8	4672.3	4190.8	3962.3	4491.6
52.5°	11286.8	11289.7	10571.0	8834.2	7114.8	7114.8	5921.8	5031.0	4465.6	4208.1	4840.1
55°	11862.3	11855.1	11242.0	9700.4	7904.4	7904.4	6471.3	5438.8	4801.0	4497.4	5278.3
57.5°	12280.3	12258.6	11704.7	10445.2	8746.0	8746.0	7093.1	5901.5	5197.3	4841.5	5855.3
60°	12439.3	12426.3	12018.5	11088.7	9631.0	9631.0	7810.4	6419.2	5647.0	5247.9	6597.1
62.5°	12500.1	12524.7	12326.5	11712.0	10578.2	10578.2	9628.1	8598.5	7038.2	6153.2	5707.8
65°	12714.1	12758.9	12718.4	12527.6	11648.3	11648.3	10708.4	9644.0	7774.2	6705.6	6200.9
67.5°	13137.8	13182.6	13200.0	13503.7	12955.6	12955.6	12054.7	10948.4	8691.1	7352.0	6712.8
70°	13127.7	13114.7	13421.2	14280.2	14592.6	14592.6	13918.7	12706.9	9819.0	8122.7	7137.9
72.5°	11949.1	11845.0	12569.5	14271.5	15954.8	15954.8	15865.2	14854.3	11273.8	8787.9	7190.0
75°	8964.4	8686.7	9966.5	12861.6	16181.8	16181.8	16970.0	16219.4	12176.2	8630.3	6352.7
77.5°	3833.6	3554.5	5062.8	9521.1	14482.7	14482.7	15863.7	14967.1	10623.0	6889.2	4200.9
80°	1003.6	1002.1	1530.0	4316.6	9849.4	9849.4	11714.8	10277.4	6860.3	3936.3	1501.1
82.5°	415.0	404.9	562.5	1678.9	4812.6	4812.6	6574.0	5365.0	3059.9	1421.5	406.4
85°	154.7	153.3	273.3	579.9	1697.7	1697.7	2711.4	1962.4	782.3	354.3	198.1
87.5°	43.4	41.9	59.3	201.0	413.6	413.6	627.6	335.5	128.7	99.8	78.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

REPORT NUMBER: P883914

CATALOG NUMBER: NAV-SB4C-727-U-SL4

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3117.8	3117.8	3117.8	3117.8	3117.8	3117.8	3117.8	3117.8	3117.8	3117.8	3117.8
2.5°	3127.9	3135.1	3148.2	3158.3	3171.3	3185.8	3206.0	3219.0	3232.0	3240.7	3234.9
5°	3140.9	3156.8	3190.1	3223.4	3262.4	3298.6	3340.5	3370.9	3395.4	3402.7	3405.6
7.5°	3169.8	3195.9	3252.3	3308.7	3370.9	3430.1	3490.9	3542.9	3584.9	3600.8	3602.2
10°	3220.5	3255.2	3334.7	3414.2	3496.7	3587.8	3665.9	3741.1	3800.3	3824.9	3826.4
12.5°	3284.1	3327.5	3431.6	3541.5	3655.7	3781.5	3882.8	3975.3	4049.1	4082.3	4082.3
15°	3366.5	3422.9	3556.0	3703.5	3871.2	4046.2	4174.9	4277.6	4360.0	4400.5	4397.6
17.5°	3456.2	3531.4	3699.1	3921.8	4161.9	4391.8	4542.2	4617.4	4702.7	4741.8	4740.3
20°	3542.9	3635.5	3875.5	4199.5	4519.1	4763.4	4884.9	4905.2	4911.0	4915.3	4926.9
22.5°	3632.6	3757.0	4096.8	4549.4	4892.2	5061.3	5078.7	4991.9	4870.5	4814.1	4830.0
25°	3730.9	3895.8	4386.0	4935.5	5213.2	5233.4	5100.4	4889.3	4659.3	4553.8	4569.7
27.5°	3826.4	4056.3	4733.1	5304.3	5444.6	5266.7	4980.4	4681.0	4403.4	4292.0	4305.0
30°	3921.8	4240.0	5116.3	5626.8	5550.1	5184.3	4790.9	4456.9	4177.8	4060.6	4073.7
32.5°	4018.7	4454.0	5557.4	5859.6	5531.3	5009.3	4555.2	4205.3	3959.4	3836.5	3852.4
35°	4128.6	4717.2	5975.3	5986.8	5405.5	4751.9	4244.3	3904.5	3690.4	3592.1	3613.8
37.5°	4271.8	5051.2	6344.0	6018.7	5185.7	4374.4	3858.2	3548.7	3372.3	3327.5	3359.3
40°	4449.6	5453.2	6626.0	5968.0	4860.3	3916.0	3435.9	3188.6	3088.9	3099.0	3133.7
42.5°	4681.0	5903.0	6824.1	5837.9	4407.7	3443.2	3065.7	2955.8	3003.5	3044.0	3081.6
45°	4981.8	6370.1	6947.1	5616.6	3895.8	3042.6	2847.4	2873.4	2909.6	2913.9	2942.8
47.5°	5366.5	6842.9	7028.0	5282.6	3373.7	2760.6	2708.5	2714.3	2707.1	2676.7	2699.9
50°	5846.6	7302.8	7100.3	4840.1	2929.8	2584.2	2514.8	2494.5	2394.7	2296.4	2309.4
52.5°	6393.2	7725.1	7130.7	4290.6	2584.2	2436.7	2323.9	2196.6	2010.1	1979.7	1989.8
55°	7000.6	8115.5	7052.6	3615.2	2293.5	2247.2	2076.6	1923.3	1903.1	1877.0	1881.4
57.5°	7726.5	8536.3	6893.6	2861.8	1995.6	2026.0	1859.7	1877.0	1840.9	1800.4	1793.2
60°	8520.4	8971.6	6614.5	2174.9	1687.6	1749.8	1803.3	1801.8	1791.7	1758.5	1746.9
62.5°	9234.8	9257.9	6064.9	1665.9	1417.2	1535.8	1681.8	1680.4	1671.7	1652.9	1645.7
65°	9659.9	9214.5	5148.1	1311.6	1194.5	1359.3	1517.0	1528.5	1530.0	1528.5	1528.5
67.5°	9584.7	8707.0	3890.0	1044.1	1010.8	1180.0	1353.5	1369.5	1381.0	1383.9	1386.8
70°	8734.4	7592.0	2536.5	833.0	847.4	1022.4	1198.8	1214.7	1224.8	1236.4	1242.2
72.5°	6808.2	5581.9	1451.9	673.9	704.3	886.5	1045.5	1064.3	1070.1	1091.8	1100.5
75°	4148.9	3282.6	783.8	530.7	578.4	757.8	893.7	915.4	925.5	951.5	954.4
77.5°	1972.5	1421.5	446.8	413.6	465.6	618.9	754.9	779.4	752.0	766.4	754.9
80°	666.7	527.8	282.0	315.2	355.7	483.0	604.5	629.1	571.2	568.3	562.5
82.5°	232.8	214.0	179.3	209.7	229.9	345.6	457.0	488.8	425.2	423.7	403.5
85°	91.1	86.8	99.8	114.2	137.4	212.6	300.8	316.7	261.7	211.1	208.2
87.5°	18.8	20.2	24.6	26.0	41.9	73.8	108.5	133.0	105.6	89.7	82.4
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)