

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: P885444

Luminaire Tested: **NAV-SB6D-727-U-SL4**

Issue Date: 10/7/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P885444  
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-SB6D-727-U-SL4  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(6) 70 CRI, 2700K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV SPILL  
LIGHT ELIMINATOR OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

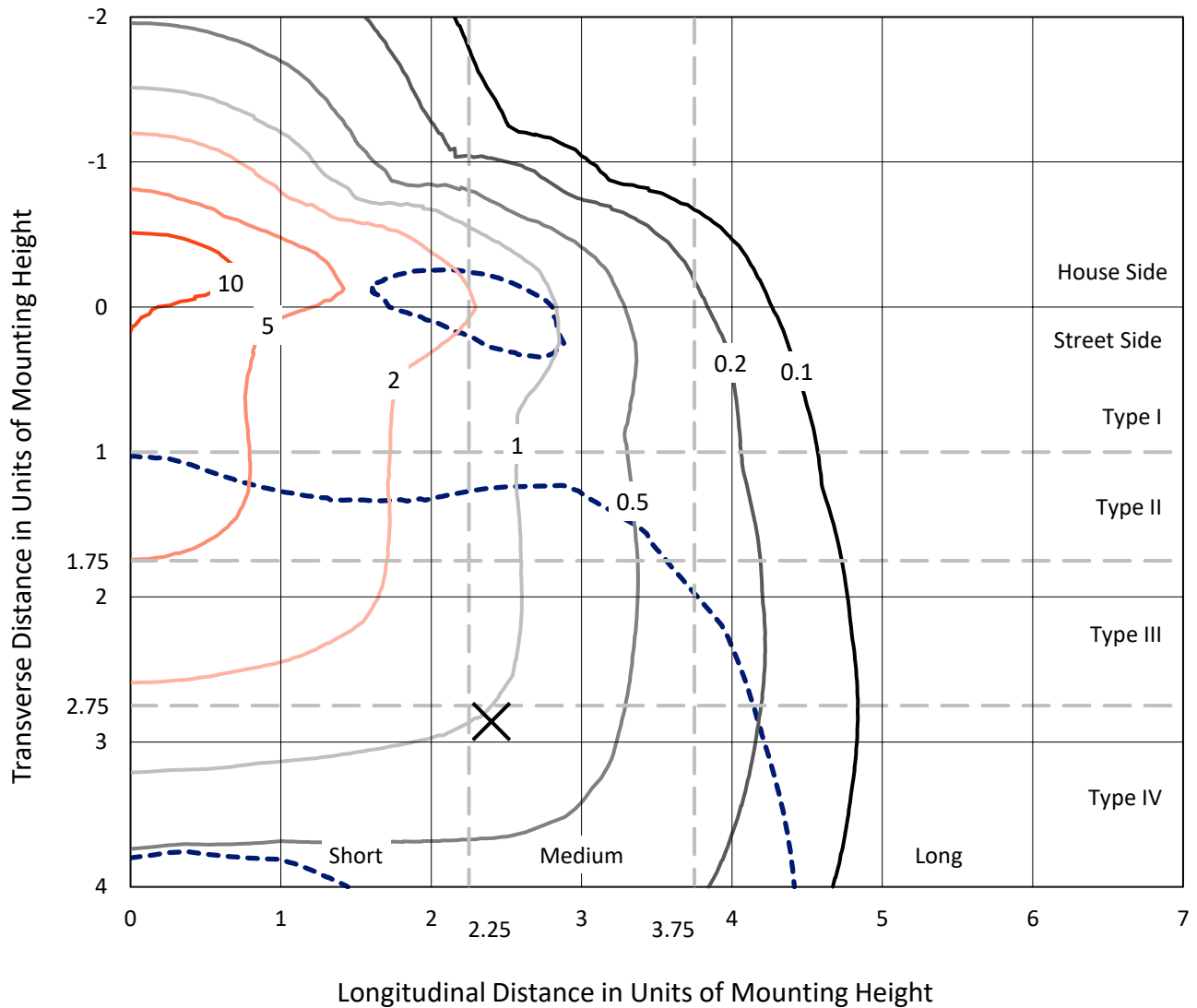
Lumens per Lamp: N/A  
Luminaire Lumens: 55486 lumens  
Efficiency: N/A  
Efficacy: 126.1 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1.5' x H: 0')  
IES Classification: Type IV - Medium  
BUG Rating: B5 - U0 - G5  
  
Input Watts (W): 440.1  
Input Voltage (V): 120.0  
Input Current (Ain): 3.68  
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



REPORT NUMBER: P885444  
 CATALOG NUMBER: NAV-SB6D-727-U-SL4

### Iso-Footcandle Lines of Horizontal Illumination

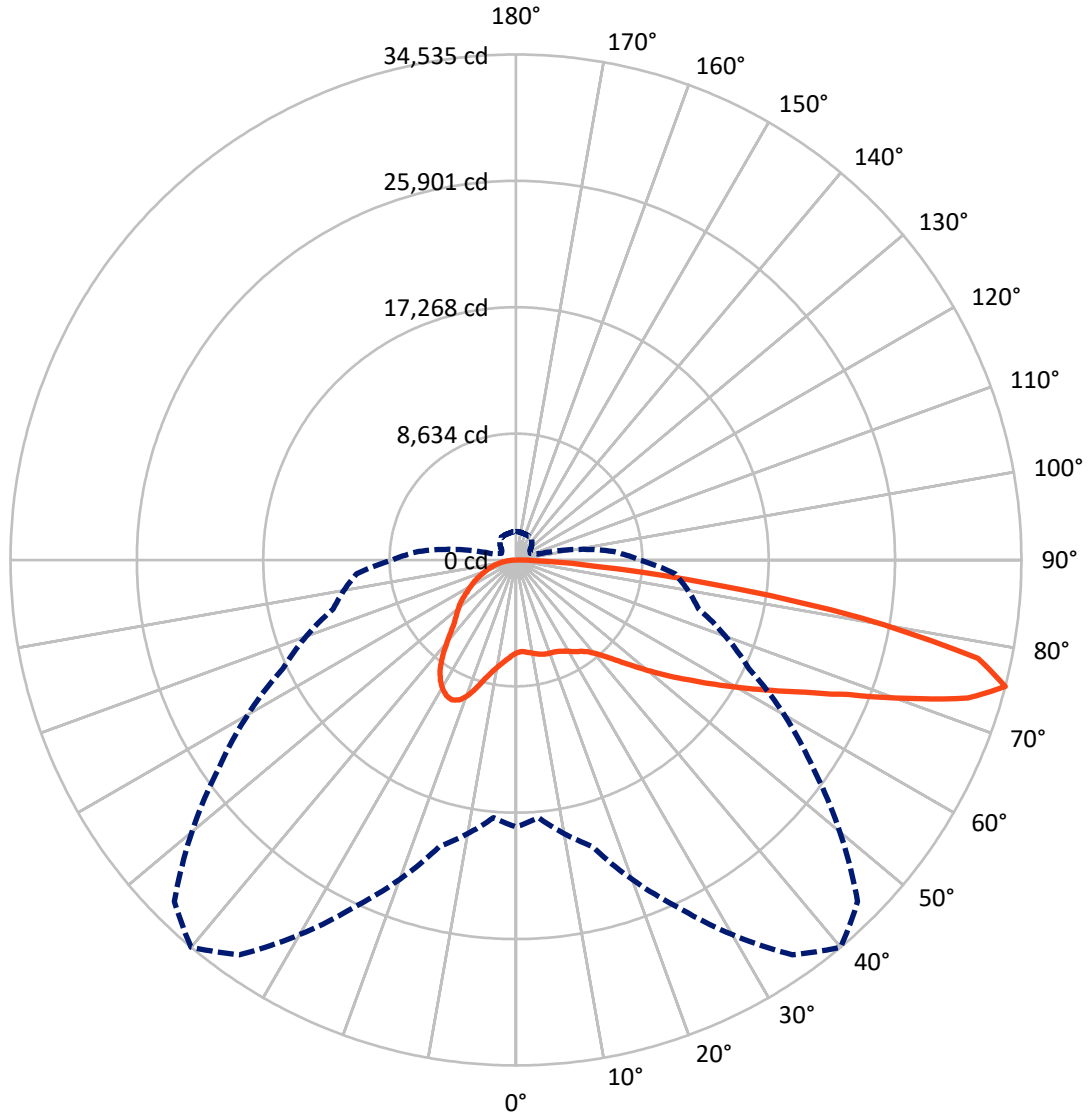
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 13.1 fc  
 Type IV - Medium - N/A

REPORT NUMBER: P885444  
CATALOG NUMBER: NAV-SB6D-727-U-SL4

### Luminous Intensity Polar Plot



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

REPORT NUMBER: P885444

CATALOG NUMBER: NAV-SB6D-727-U-SL4

**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	17191.4	0.0	17191.4
	% Fixture	31.0	0.0	31.0
<b>Street Side</b>	Lumens	38294.6	0.0	38294.6
	% Fixture	69.0	0.0	69.0
<b>Total</b>	Lumens	55486.0	0.0	55486.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	633.3	1.1
10°-20°	2126.4	3.8
20°-30°	3882.7	7.0
30°-40°	5506.7	9.9
40°-50°	7435.7	13.4
50°-60°	10003.0	18.0
60°-70°	12696.1	22.9
70°-80°	11522.5	20.8
80°-90°	1679.6	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°	55486.0	100.0
0°-180°	55486.0	100.0

**Coefficient of Utilization**



REPORT NUMBER: P885444

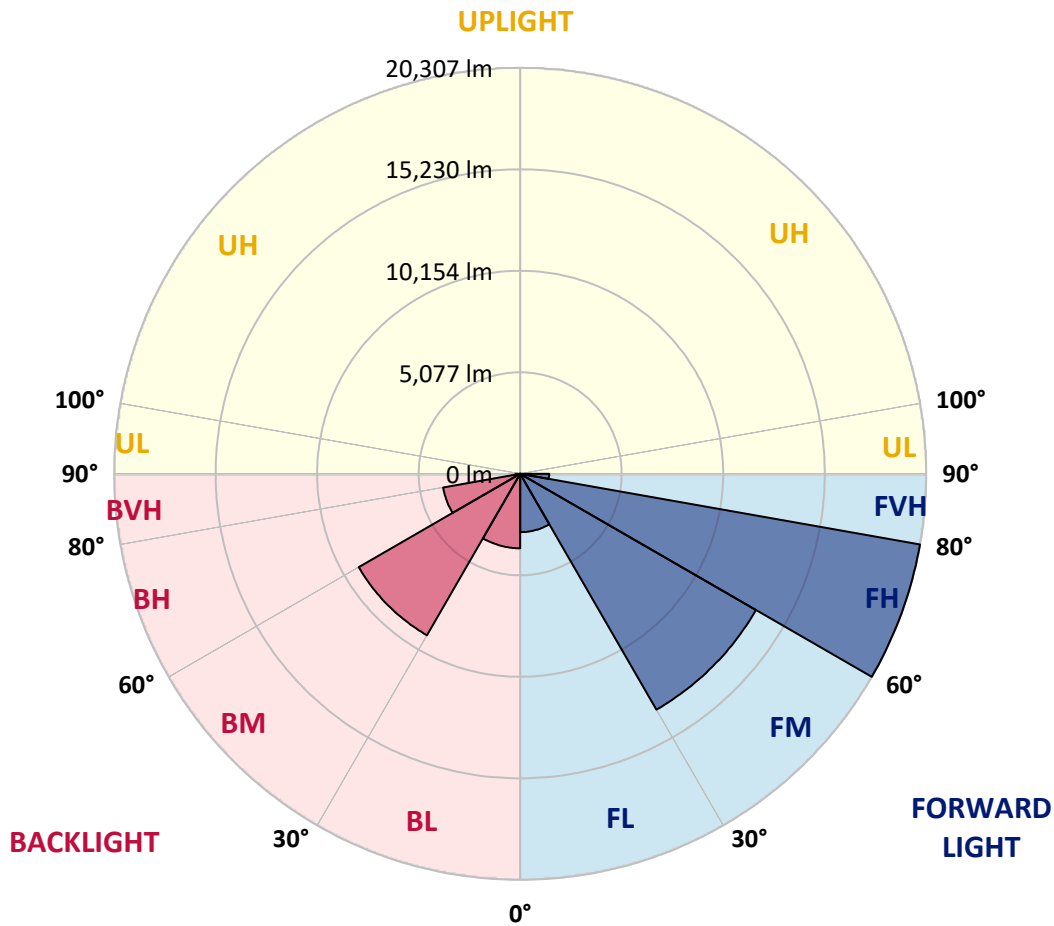
CATALOG NUMBER: NAV-SB6D-727-U-SL4

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2918.6	5.3			
FM (30°-60°)	13620.6	24.5			
FH (60°-80°)	20307.0	36.6			G5
FVH (80°-90°)	1448.4	2.6			G5
BL (0°-30°)	3723.8	6.7	B4/5000		
BM (30°-60°)	9324.8	16.8	B5		
BH (60°-80°)	3911.6	7.0	B4/5000		G4/5000
BVH (80°-90°)	231.2	0.4			G3/500
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B5-U0-G5**

Type IV Medium



REPORT NUMBER: P885444

CATALOG NUMBER: NAV-SB6D-727-U-SL4

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	40°	45°	55°	65°	75°	85°
0°	6344.9	6344.9	6344.9	6344.9	6344.9	6344.9	6344.9	6344.9	6344.9	6344.9	6344.9
2.5°	6247.8	6283.1	6274.3	6262.5	6262.5	6265.4	6262.5	6283.1	6303.7	6324.3	6356.7
5°	6312.5	6347.8	6330.2	6315.5	6303.7	6300.8	6291.9	6289.0	6300.8	6327.2	6371.4
7.5°	6439.1	6474.4	6447.9	6421.4	6397.9	6386.1	6374.3	6356.7	6347.8	6362.6	6424.4
10°	6580.3	6615.6	6583.3	6536.2	6497.9	6483.2	6471.4	6453.8	6442.0	6450.8	6518.5
12.5°	6721.6	6756.9	6712.8	6648.0	6598.0	6589.2	6574.4	6568.6	6565.6	6562.7	6630.4
15°	6854.0	6883.4	6827.5	6751.0	6698.0	6683.3	6668.6	6677.4	6692.2	6709.8	6786.3
17.5°	6957.0	6986.5	6904.0	6804.0	6754.0	6748.1	6739.2	6768.7	6809.9	6854.0	6948.2
20°	7051.2	7080.6	6974.7	6839.3	6780.4	6780.4	6783.4	6845.2	6904.0	6968.8	7098.3
22.5°	7183.6	7207.2	7077.7	6892.3	6806.9	6812.8	6836.4	6898.2	6971.7	7060.0	7239.5
25°	7380.8	7398.5	7239.5	6992.3	6895.2	6912.9	6933.5	6962.9	7033.5	7136.5	7377.9
27.5°	7698.6	7713.3	7504.4	7168.9	7021.8	7051.2	7080.6	7060.0	7092.4	7180.7	7489.7
30°	8146.0	8154.8	7889.9	7445.5	7236.6	7251.3	7257.2	7171.9	7110.1	7180.7	7569.1
32.5°	8675.7	8672.7	8357.8	7781.0	7480.9	7466.1	7416.1	7248.4	7104.2	7166.0	7639.8
35°	9496.7	9464.4	9058.3	8251.9	7757.5	7666.3	7548.5	7333.7	7133.6	7151.3	7701.6
37.5°	10856.4	10756.3	10194.2	9022.9	8169.5	7937.0	7763.4	7472.0	7198.3	7145.4	7775.1
40°	12389.6	12263.1	11645.1	10079.4	8787.5	8413.8	8134.2	7669.2	7304.3	7171.9	7884.0
42.5°	14208.3	14028.8	13363.7	11324.3	9570.3	9028.8	8608.0	7919.4	7460.3	7257.2	8031.2
45°	16442.0	16203.6	15261.9	12728.1	10556.2	9835.2	9273.1	8299.0	7698.6	7422.0	8251.9
47.5°	18699.2	18758.1	17419.0	14334.9	11739.2	10829.9	10105.9	8869.9	8045.9	7686.9	8608.0
50°	21097.7	21138.9	19564.4	16115.3	13081.2	11954.1	11041.8	9508.5	8528.5	8063.6	9140.7
52.5°	22969.4	22975.2	21512.6	17978.2	14479.1	13190.1	12051.2	10238.4	9087.7	8563.8	9849.9
55°	24140.6	24125.9	22878.1	19741.0	16085.9	14487.9	13169.5	11068.3	9770.4	9152.4	10741.6
57.5°	24991.1	24947.0	23819.9	21256.6	17798.7	16021.2	14434.9	12010.0	10576.8	9852.8	11915.8
60°	25314.8	25288.4	24458.5	22566.2	19599.7	17716.3	15894.6	13063.5	11492.0	10679.8	13425.5
62.5°	25438.5	25488.5	25085.3	23834.6	21527.3	19593.8	17498.5	14323.1	12522.1	11615.6	15017.6
65°	25874.0	25965.2	25882.8	25494.4	23705.1	21792.2	19626.2	15821.0	13646.2	12619.2	16680.4
67.5°	26736.3	26827.5	26862.8	27480.8	26365.5	24532.0	22280.7	17686.8	14961.7	13661.0	17931.1
70°	26715.7	26689.2	27313.1	29061.2	29696.8	28325.4	25859.3	19982.3	16530.3	14526.2	18090.0
72.5°	24317.2	24105.3	25579.7	29043.5	32469.0	32286.6	30229.5	22942.9	17884.0	14632.1	15697.4
75°	18243.1	17678.0	20282.5	26174.2	32931.1	34535.0	33007.6	24779.2	17563.2	12928.2	10924.1
77.5°	7801.6	7233.7	10303.1	19376.1	29473.2	32283.6	30459.0	21618.6	14020.0	8549.1	5364.9
80°	2042.4	2039.4	3113.6	8784.6	20044.1	23840.5	20915.2	13961.1	8010.6	3054.7	1480.3
82.5°	844.6	824.0	1144.8	3416.7	9794.0	13378.4	10918.2	6227.2	2892.9	827.0	491.5
85°	314.9	311.9	556.2	1180.1	3455.0	5517.9	3993.5	1592.1	721.0	403.2	220.7
87.5°	88.3	85.3	120.7	409.1	841.7	1277.2	682.8	261.9	203.1	158.9	64.7
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: P885444  
 CATALOG NUMBER: NAV-SB6D-727-U-SL4

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	6344.9	6344.9	6344.9	6344.9	6344.9	6344.9	6344.9	6344.9	6344.9	6344.9	6344.9
2.5°	6365.5	6380.2	6406.7	6427.3	6453.8	6483.2	6524.4	6550.9	6577.4	6595.0	6583.3
5°	6392.0	6424.4	6492.0	6559.7	6639.2	6712.8	6798.1	6859.9	6909.9	6924.6	6930.5
7.5°	6450.8	6503.8	6618.6	6733.4	6859.9	6980.6	7104.2	7210.1	7295.5	7327.8	7330.8
10°	6553.8	6624.5	6786.3	6948.2	7115.9	7301.3	7460.3	7613.3	7733.9	7784.0	7786.9
12.5°	6683.3	6771.6	6983.5	7207.2	7439.7	7695.7	7901.7	8090.0	8240.1	8307.8	8307.8
15°	6851.1	6965.9	7236.6	7536.8	7878.2	8234.2	8496.2	8705.1	8872.9	8955.3	8949.4
17.5°	7033.5	7186.6	7527.9	7981.2	8469.7	8937.6	9243.7	9396.7	9570.3	9649.8	9646.8
20°	7210.1	7398.5	7887.0	8546.2	9196.6	9693.9	9941.1	9982.3	9994.1	10002.9	10026.5
22.5°	7392.6	7645.7	8337.2	9258.4	9955.8	10300.2	10335.5	10158.9	9911.7	9796.9	9829.3
25°	7592.7	7928.2	8925.8	10044.1	10609.2	10650.4	10379.6	9950.0	9482.0	9267.2	9299.6
27.5°	7786.9	8254.8	9632.1	10794.6	11080.0	10718.1	10135.4	9526.2	8961.1	8734.5	8761.0
30°	7981.2	8628.6	10412.0	11450.8	11294.9	10550.3	9749.8	9070.0	8502.0	8263.7	8290.2
32.5°	8178.3	9064.1	11309.6	11924.6	11256.6	10194.2	9270.1	8558.0	8057.7	7807.5	7839.9
35°	8402.0	9599.7	12160.1	12183.6	11000.6	9670.4	8637.4	7945.8	7510.3	7310.2	7354.3
37.5°	8693.3	10279.6	12910.5	12248.4	10553.2	8902.3	7851.7	7221.9	6862.8	6771.6	6836.4
40°	9055.3	11097.7	13484.4	12145.4	9891.1	7969.4	6992.3	6489.1	6286.0	6306.6	6377.3
42.5°	9526.2	12012.9	13887.6	11880.5	8970.0	7007.1	6239.0	6015.3	6112.4	6194.8	6271.3
45°	10138.3	12963.5	14137.7	11430.2	7928.2	6191.9	5794.6	5847.5	5921.1	5929.9	5988.8
47.5°	10921.1	13925.8	14302.5	10750.4	6865.8	5618.0	5512.1	5523.8	5509.1	5447.3	5494.4
50°	11898.2	14861.7	14449.7	9849.9	5962.3	5259.0	5117.7	5076.5	4873.4	4673.3	4699.8
52.5°	13010.6	15721.0	14511.5	8731.6	5259.0	4958.8	4729.2	4470.3	4090.6	4028.8	4049.4
55°	14246.6	16515.6	14352.5	7357.3	4667.4	4573.3	4226.0	3914.1	3872.9	3819.9	3828.7
57.5°	15723.9	17372.0	14028.8	5824.0	4061.2	4123.0	3784.6	3819.9	3746.3	3663.9	3649.2
60°	17339.6	18257.8	13460.8	4426.1	3434.4	3560.9	3669.8	3666.9	3646.3	3578.6	3555.0
62.5°	18793.4	18840.5	12342.5	3390.2	2884.0	3125.4	3422.6	3419.7	3402.0	3363.7	3349.0
65°	19658.6	18752.2	10476.7	2669.2	2430.8	2766.3	3087.1	3110.6	3113.6	3110.6	3110.6
67.5°	19505.6	17719.2	7916.4	2124.8	2057.1	2401.4	2754.6	2786.9	2810.5	2816.4	2822.2
70°	17775.1	15450.2	5161.9	1695.1	1724.5	2080.6	2439.7	2472.0	2492.6	2516.2	2528.0
72.5°	13855.2	11359.6	2954.7	1371.4	1433.2	1804.0	2127.7	2166.0	2177.7	2221.9	2239.5
75°	8443.2	6680.4	1595.1	1080.0	1177.2	1542.1	1818.7	1862.9	1883.5	1936.4	1942.3
77.5°	4014.1	2892.9	909.4	841.7	947.6	1259.6	1536.2	1586.2	1530.3	1559.7	1536.2
80°	1356.7	1074.2	573.9	641.6	724.0	982.9	1230.1	1280.2	1162.4	1156.6	1144.8
82.5°	473.8	435.5	364.9	426.7	467.9	703.4	930.0	994.7	865.2	862.3	821.1
85°	185.4	176.6	203.1	232.5	279.6	432.6	612.1	644.5	532.7	429.7	423.8
87.5°	38.3	41.2	50.0	53.0	85.3	150.1	220.7	270.7	214.8	182.5	167.7
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)