

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: P885524

Luminaire Tested: **NAV-SB6D-835-U-SL4**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P885524
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-835-U-SL4
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(6) 80 CRI, 3500K, 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: 51659 lumens
Efficiency: N/A
Efficacy: 117.4 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1.5' x H: 0')
IES Classification: Type IV - Medium
BUG Rating: B5 - U0 - G5

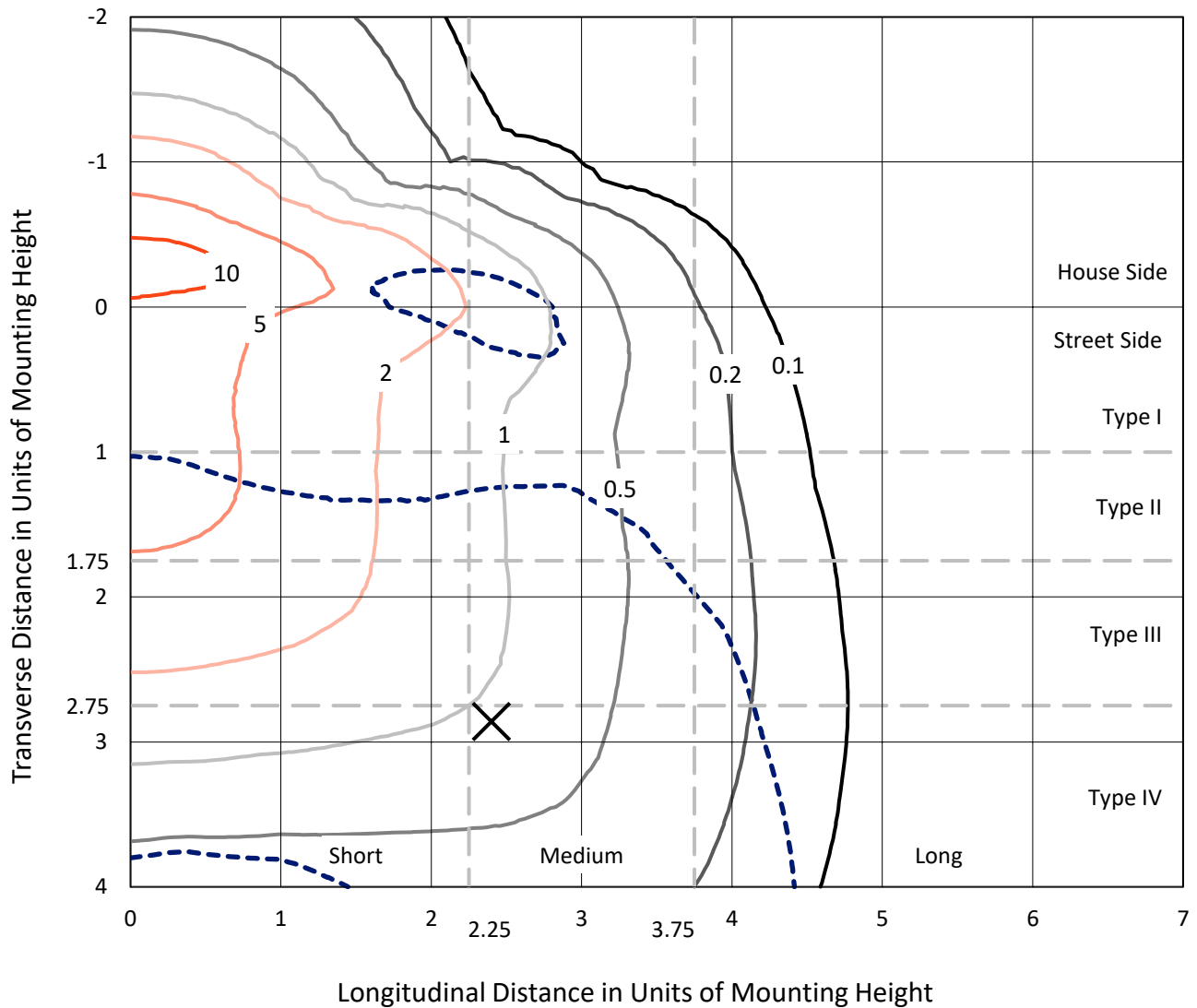
Input Watts (W): 440.1
Input Voltage (V): 120.0
Input Current (Ain): 3.68
Voltage Rise (V): NR
Power Factor: 0.998
Total Harmonic Distortion (THDi): 2.542
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

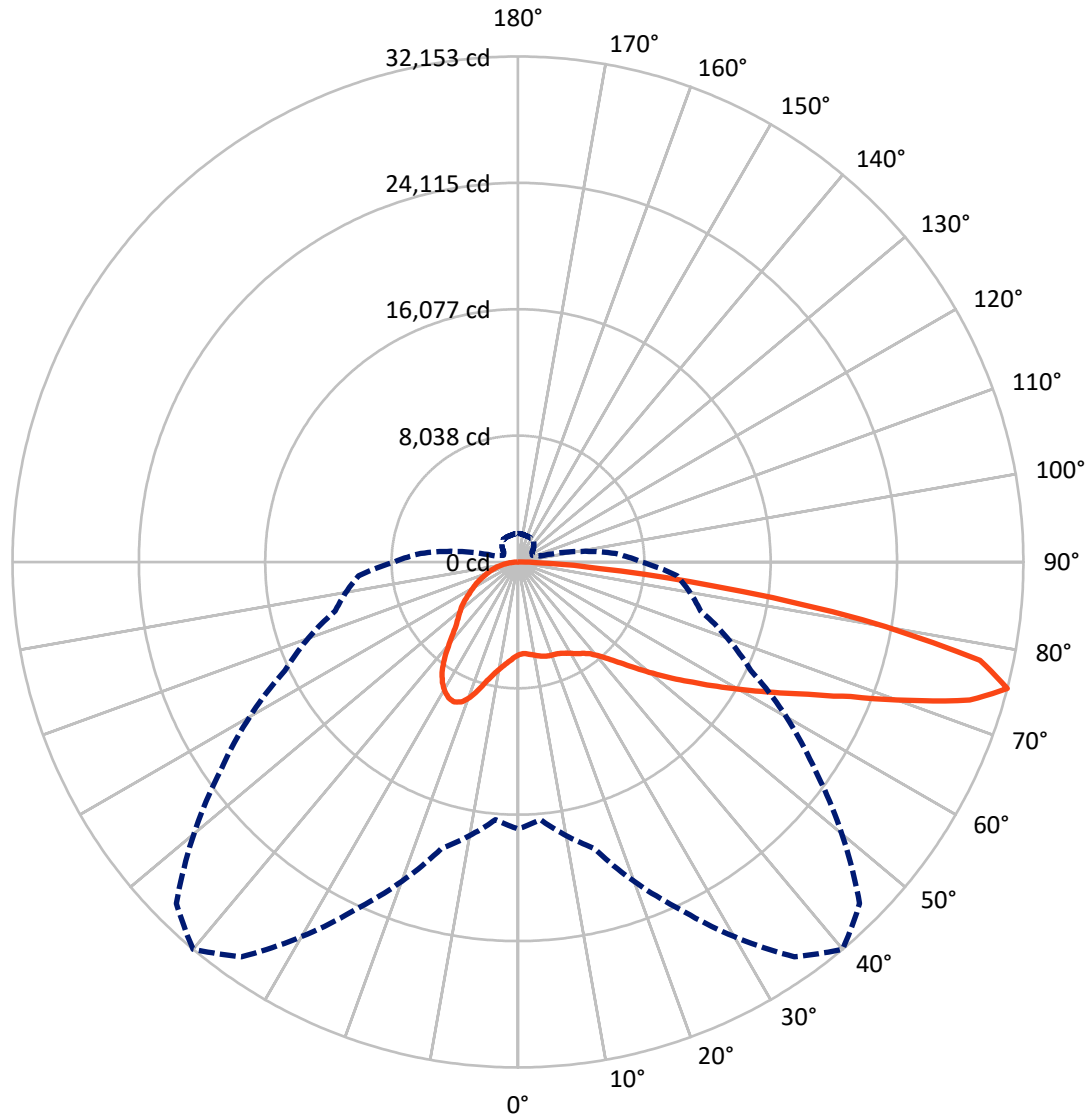
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 12.2 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	16005.7	0.0	16005.7
	% Fixture	31.0	0.0	31.0
Street Side	Lumens	35653.3	0.0	35653.3
	% Fixture	69.0	0.0	69.0
Total	Lumens	51659.0	0.0	51659.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	589.7	1.1
10°-20°	1979.8	3.8
20°-30°	3614.9	7.0
30°-40°	5126.9	9.9
40°-50°	6922.8	13.4
50°-60°	9313.1	18.0
60°-70°	11820.4	22.9
70°-80°	10727.8	20.8
80°-90°	1563.8	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°	51659.0	100.0
0°-180°	51659.0	100.0

Coefficient of Utilization



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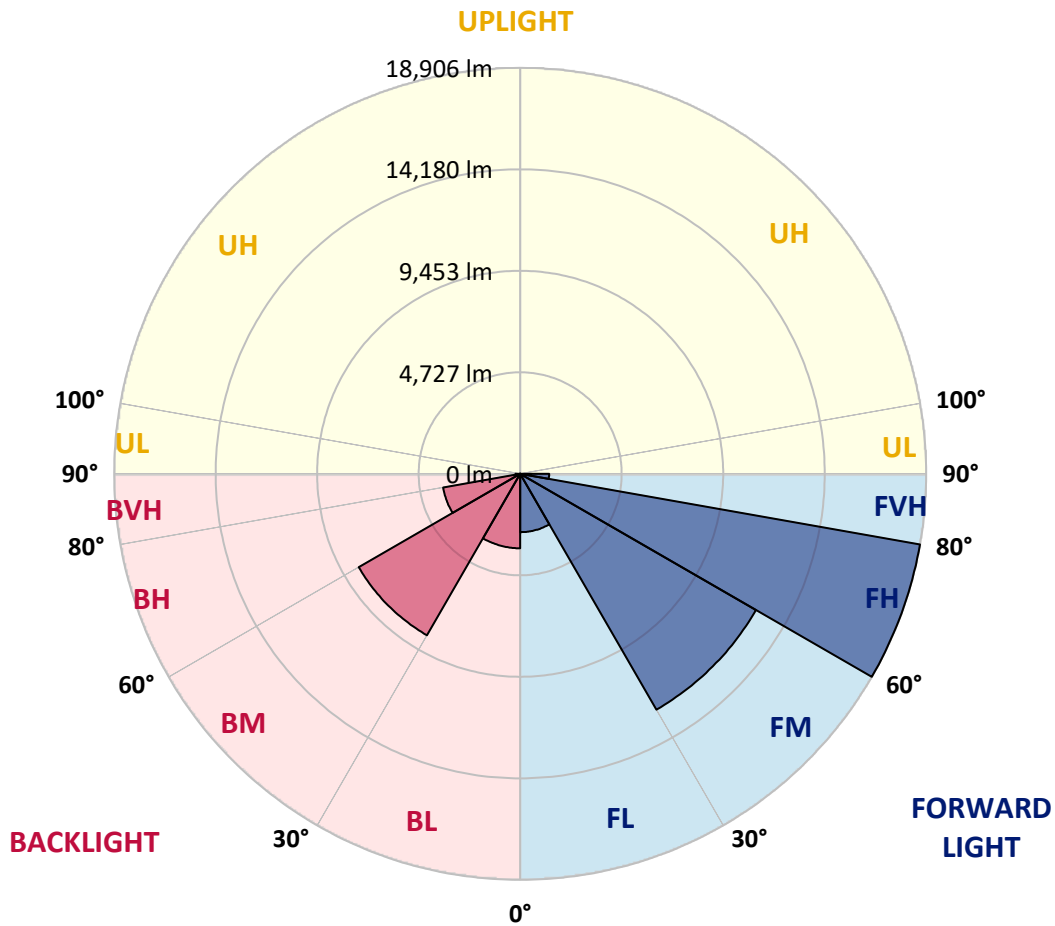
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2717.3	5.3			
FM (30°-60°)	12681.1	24.5			
FH (60°-80°)	18906.4	36.6			G5
FVH (80°-90°)	1348.5	2.6			G5
BL (0°-30°)	3467.0	6.7	B4/5000		
BM (30°-60°)	8681.6	16.8	B5		
BH (60°-80°)	3641.8	7.0	B4/5000		G4/5000
BVH (80°-90°)	215.3	0.4			G2/225
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



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	40°	45°	55°	65°	75°	85°
0°	5907.3	5907.3	5907.3	5907.3	5907.3	5907.3	5907.3	5907.3	5907.3	5907.3	5907.3
2.5°	5816.9	5849.7	5841.5	5830.6	5830.6	5833.3	5830.6	5849.7	5868.9	5888.1	5918.2
5°	5877.1	5910.0	5893.6	5879.9	5868.9	5866.2	5858.0	5855.2	5866.2	5890.8	5931.9
7.5°	5995.0	6027.8	6003.2	5978.5	5956.6	5945.6	5934.7	5918.2	5910.0	5923.7	5981.3
10°	6126.5	6159.3	6129.2	6085.4	6049.8	6036.1	6025.1	6008.7	5997.7	6005.9	6068.9
12.5°	6258.0	6290.9	6249.8	6189.5	6142.9	6134.7	6121.0	6115.5	6112.8	6110.0	6173.0
15°	6381.3	6408.7	6356.6	6285.4	6236.1	6222.4	6208.7	6216.9	6230.6	6247.0	6318.3
17.5°	6477.2	6504.6	6427.9	6334.7	6288.1	6282.6	6274.4	6301.8	6340.2	6381.3	6469.0
20°	6564.9	6592.3	6493.6	6367.6	6312.8	6312.8	6315.5	6373.1	6427.9	6488.1	6608.7
22.5°	6688.2	6710.1	6589.5	6416.9	6337.4	6342.9	6364.8	6422.4	6490.9	6573.1	6740.2
25°	6871.7	6888.2	6740.2	6510.1	6419.6	6436.1	6455.3	6482.7	6548.4	6644.3	6869.0
27.5°	7167.6	7181.3	6986.8	6674.5	6537.5	6564.9	6592.3	6573.1	6603.2	6685.4	6973.1
30°	7584.1	7592.3	7345.7	6932.0	6737.5	6751.2	6756.7	6677.2	6619.7	6685.4	7047.1
32.5°	8077.3	8074.6	7781.4	7244.4	6964.9	6951.2	6904.6	6748.4	6614.2	6671.7	7112.8
35°	8841.7	8811.6	8433.5	7682.7	7222.4	7137.5	7027.9	6827.9	6641.6	6658.0	7170.4
37.5°	10107.6	10014.4	9491.1	8400.6	7606.0	7389.6	7227.9	6956.7	6701.9	6652.5	7238.9
40°	11535.1	11417.3	10841.9	9384.2	8181.4	7833.4	7573.1	7140.2	6800.5	6677.2	7340.3
42.5°	13228.4	13061.2	12442.0	10543.2	8910.2	8406.1	8014.3	7373.1	6945.7	6756.7	7477.3
45°	15308.0	15086.0	14209.2	11850.2	9828.1	9156.8	8633.5	7726.6	7167.6	6910.1	7682.7
47.5°	17409.5	17464.3	16217.6	13346.2	10929.6	10082.9	9408.9	8258.1	7491.0	7156.7	8014.3
50°	19642.5	19680.9	18215.0	15003.8	12179.0	11129.6	10280.2	8852.7	7940.3	7507.4	8510.2
52.5°	21385.1	21390.6	20028.8	16738.2	13480.4	12280.3	11220.0	9532.2	8460.9	7973.2	9170.5
55°	22475.6	22461.9	21300.2	18379.4	14976.4	13488.6	12261.2	10304.9	9096.5	8521.2	10000.7
57.5°	23267.4	23226.3	22176.9	19790.5	16571.1	14916.1	13439.3	11181.6	9847.3	9173.3	11094.0
60°	23568.8	23544.2	22771.5	21009.7	18247.9	16494.3	14798.3	12162.5	10699.4	9943.2	12499.5
62.5°	23683.9	23730.5	23355.1	22190.6	20042.5	18242.4	16291.6	13335.2	11658.4	10814.5	13981.8
65°	24089.4	24174.3	24097.6	23736.0	22070.1	20289.1	18272.6	14729.8	12705.0	11748.8	15529.9
67.5°	24892.2	24977.1	25010.0	25585.4	24547.0	22840.0	20744.0	16466.9	13929.8	12718.7	16694.4
70°	24873.0	24848.4	25429.2	27056.7	27648.6	26371.8	24075.7	18604.1	15390.2	13524.3	16842.3
72.5°	22640.0	22442.7	23815.4	27040.3	30229.6	30059.7	28144.5	21360.4	16650.5	13622.9	14614.8
75°	16984.8	16458.7	18883.6	24368.9	30659.7	32153.0	30731.0	23070.2	16351.9	12036.5	10170.6
77.5°	7263.5	6734.7	9592.5	18039.7	27440.3	30057.0	28358.2	20127.5	13053.0	7959.5	4994.9
80°	1901.5	1898.8	2898.8	8178.7	18661.6	22196.1	19472.6	12998.2	7458.1	2844.0	1378.2
82.5°	786.4	767.2	1065.8	3181.1	9118.5	12455.7	10165.1	5797.7	2693.3	769.9	457.6
85°	293.2	290.4	517.8	1098.7	3216.7	5137.4	3718.1	1482.3	671.3	375.4	205.5
87.5°	82.2	79.5	112.3	380.8	783.6	1189.1	635.7	243.9	189.1	148.0	60.3
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°	5907.3	5907.3	5907.3	5907.3	5907.3	5907.3	5907.3	5907.3	5907.3	5907.3	5907.3
2.5°	5926.5	5940.2	5964.8	5984.0	6008.7	6036.1	6074.4	6099.1	6123.7	6140.2	6129.2
5°	5951.1	5981.3	6044.3	6107.3	6181.3	6249.8	6329.2	6386.8	6433.3	6447.0	6452.5
7.5°	6005.9	6055.2	6162.1	6268.9	6386.8	6499.1	6614.2	6712.8	6792.3	6822.4	6825.1
10°	6101.8	6167.6	6318.3	6469.0	6625.1	6797.8	6945.7	7088.2	7200.5	7247.1	7249.8
12.5°	6222.4	6304.6	6501.8	6710.1	6926.5	7164.9	7356.7	7532.1	7671.8	7734.8	7734.8
15°	6378.5	6485.4	6737.5	7016.9	7334.8	7666.3	7910.2	8104.7	8260.9	8337.6	8332.1
17.5°	6548.4	6690.9	7008.7	7430.7	7885.5	8321.1	8606.1	8748.6	8910.2	8984.2	8981.5
20°	6712.8	6888.2	7343.0	7956.7	8562.3	9025.3	9255.5	9293.8	9304.8	9313.0	9334.9
22.5°	6882.7	7118.3	7762.2	8619.8	9269.2	9589.7	9622.6	9458.2	9228.1	9121.2	9151.3
25°	7069.0	7381.4	8310.2	9351.4	9877.4	9915.8	9663.7	9263.7	8828.0	8628.0	8658.2
27.5°	7249.8	7685.5	8967.8	10050.0	10315.8	9978.8	9436.3	8869.1	8343.1	8132.1	8156.8
30°	7430.7	8033.5	9693.9	10661.0	10515.8	9822.6	9077.4	8444.4	7915.6	7693.7	7718.4
32.5°	7614.2	8439.0	10529.5	11102.2	10480.2	9491.1	8630.8	7967.7	7501.9	7269.0	7299.2
35°	7822.5	8937.6	11321.4	11343.3	10241.8	9003.4	8041.7	7397.8	6992.3	6806.0	6847.1
37.5°	8093.7	9570.6	12020.0	11403.6	9825.4	8288.3	7310.1	6723.8	6389.5	6304.6	6364.8
40°	8430.7	10332.3	12554.3	11307.7	9208.9	7419.7	6510.1	6041.5	5852.5	5871.7	5937.4
42.5°	8869.1	11184.4	12929.7	11061.1	8351.3	6523.8	5808.6	5600.4	5690.8	5767.5	5838.8
45°	9439.0	12069.4	13162.6	10641.9	7381.4	5764.8	5394.9	5444.2	5512.7	5520.9	5575.7
47.5°	10167.9	12965.3	13316.0	10008.9	6392.2	5230.5	5131.9	5142.8	5129.1	5071.6	5115.4
50°	11077.5	13836.6	13453.0	9170.5	5551.1	4896.2	4764.7	4726.4	4537.3	4351.0	4375.7
52.5°	12113.2	14636.7	13510.6	8129.4	4896.2	4616.8	4403.1	4161.9	3808.5	3751.0	3770.1
55°	13264.0	15376.5	13362.6	6849.8	4345.5	4257.8	3934.5	3644.1	3605.7	3556.4	3564.6
57.5°	14639.4	16173.8	13061.2	5422.3	3781.1	3838.6	3523.5	3556.4	3487.9	3411.2	3397.5
60°	16143.6	16998.5	12532.4	4120.8	3197.5	3315.3	3416.7	3413.9	3394.8	3331.7	3309.8
62.5°	17497.2	17541.0	11491.2	3156.4	2685.1	2909.8	3186.5	3183.8	3167.4	3131.7	3118.0
65°	18302.7	17458.8	9754.1	2485.1	2263.2	2575.5	2874.2	2896.1	2898.8	2896.1	2896.1
67.5°	18160.2	16497.1	7370.4	1978.2	1915.2	2235.8	2564.6	2594.7	2616.6	2622.1	2627.6
70°	16549.1	14384.6	4805.8	1578.2	1605.6	1937.1	2271.4	2301.5	2320.7	2342.6	2353.6
72.5°	12899.6	10576.1	2750.9	1276.8	1334.3	1679.6	1981.0	2016.6	2027.5	2068.6	2085.1
75°	7860.8	6219.6	1485.0	1005.6	1096.0	1435.7	1693.3	1734.4	1753.6	1802.9	1808.3
77.5°	3737.3	2693.3	846.6	783.6	882.3	1172.7	1430.2	1476.8	1424.8	1452.2	1430.2
80°	1263.1	1000.1	534.3	597.3	674.0	915.1	1145.3	1191.9	1082.3	1076.8	1065.8
82.5°	441.1	405.5	339.8	397.3	435.6	654.8	865.8	926.1	805.5	802.8	764.4
85°	172.6	164.4	189.1	216.5	260.3	402.8	569.9	600.0	495.9	400.0	394.5
87.5°	35.6	38.4	46.6	49.3	79.5	139.7	205.5	252.1	200.0	169.9	156.2
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)