

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: P885514

Luminaire Tested: **NAV-SB6D-830-U-SL4**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P885514
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-830-U-SL4
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(6) 80 CRI, 3000K, 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: 53572 lumens
Efficiency: N/A
Efficacy: 121.7 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1.5' x H: 0')
IES Classification: Type IV - Medium
BUG Rating: B5 - U0 - G5

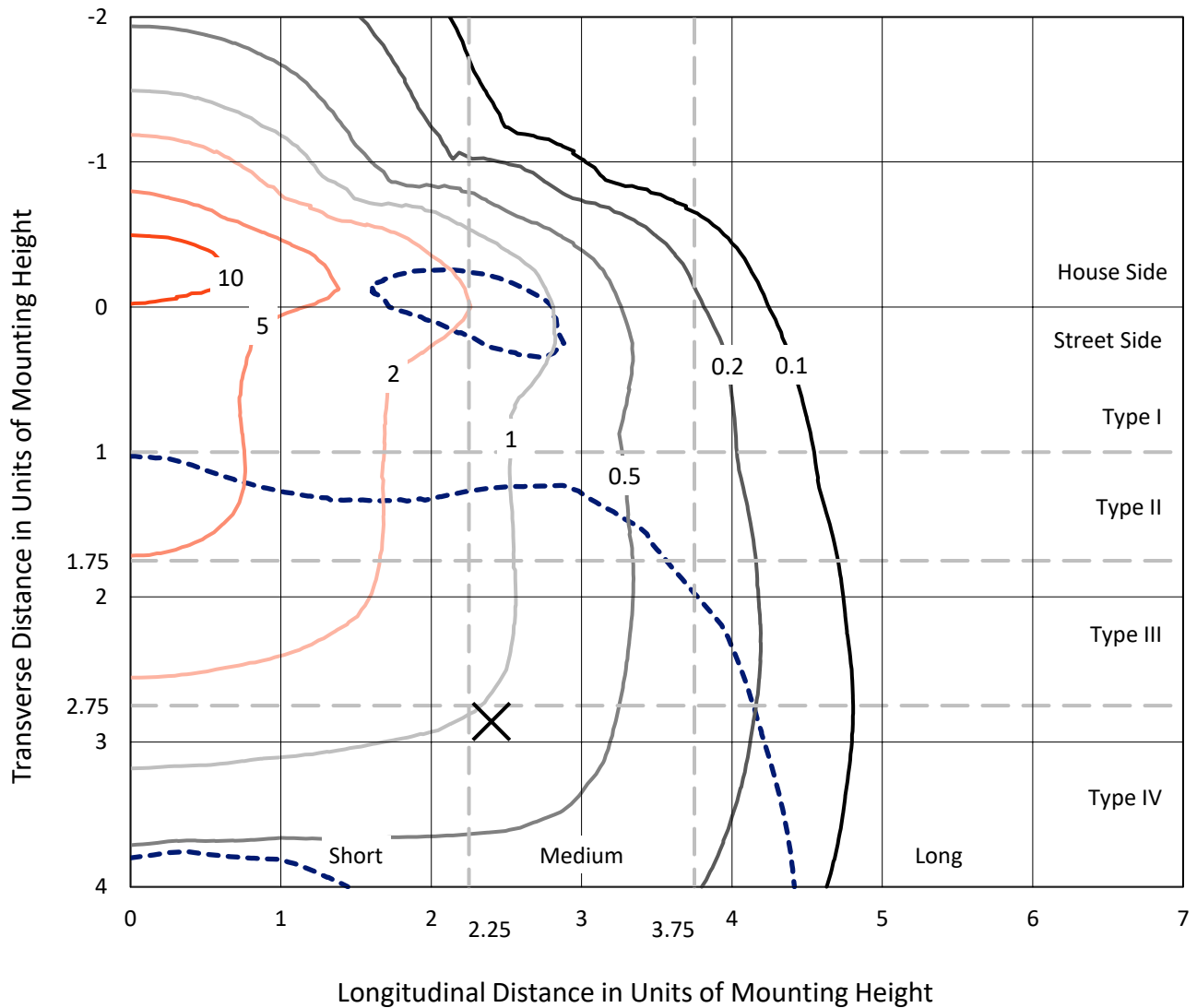
Input Watts (W): 440.1
Input Voltage (V): 120.0
Input Current (Ain): 3.68
Voltage Rise (V): NR
Power Factor: 0.998
Total Harmonic Distortion (THDi): 2.542
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

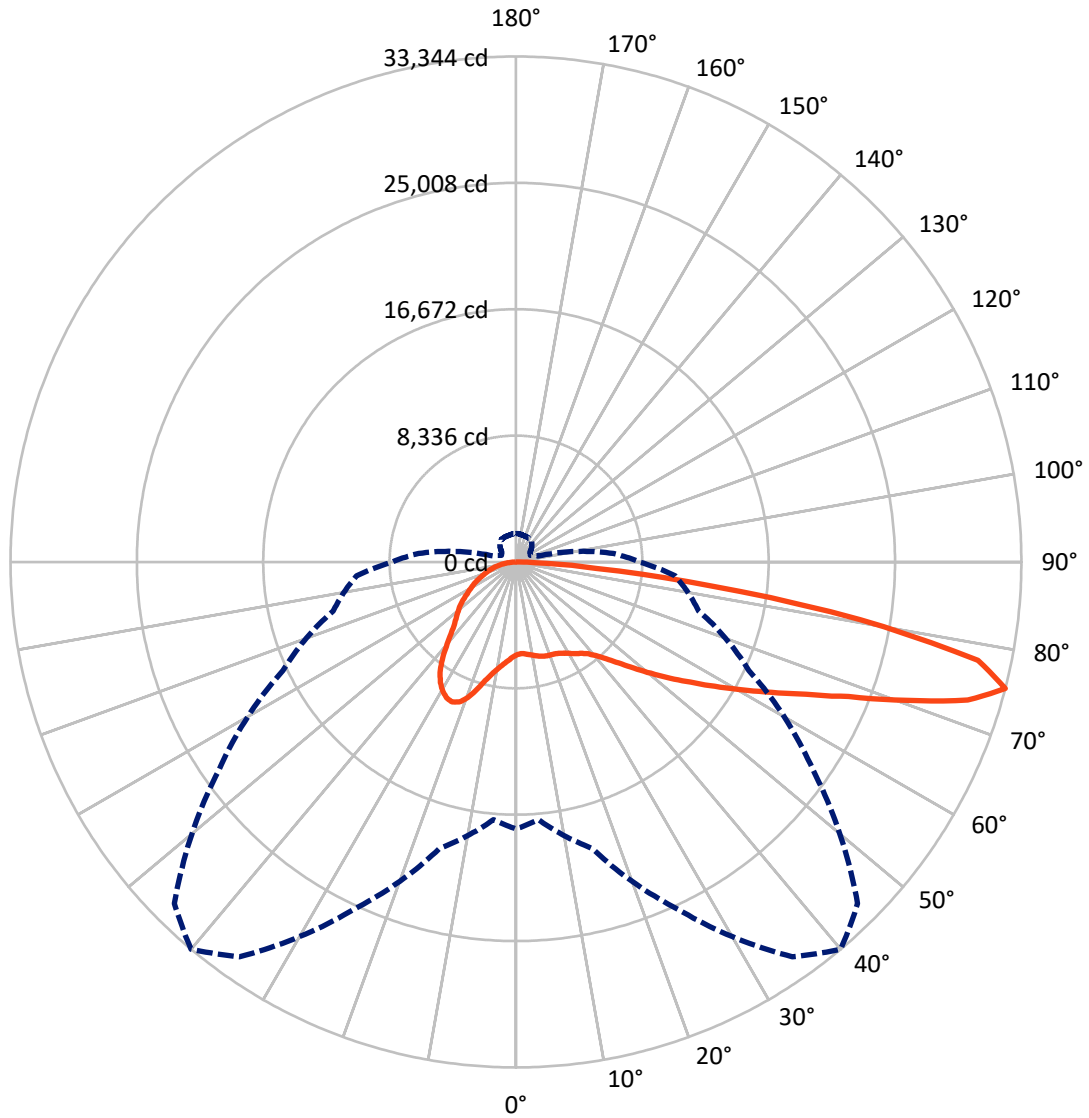
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 12.7 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	16598.4	0.0	16598.4
	% Fixture	31.0	0.0	31.0
Street Side	Lumens	36973.6	0.0	36973.6
	% Fixture	69.0	0.0	69.0
Total	Lumens	53572.0	0.0	53572.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	611.5	1.1
10°-20°	2053.1	3.8
20°-30°	3748.7	7.0
30°-40°	5316.7	9.9
40°-50°	7179.2	13.4
50°-60°	9657.9	18.0
60°-70°	12258.1	22.9
70°-80°	11125.0	20.8
80°-90°	1621.7	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°	53572.0	100.0
0°-180°	53572.0	100.0

Coefficient of Utilization



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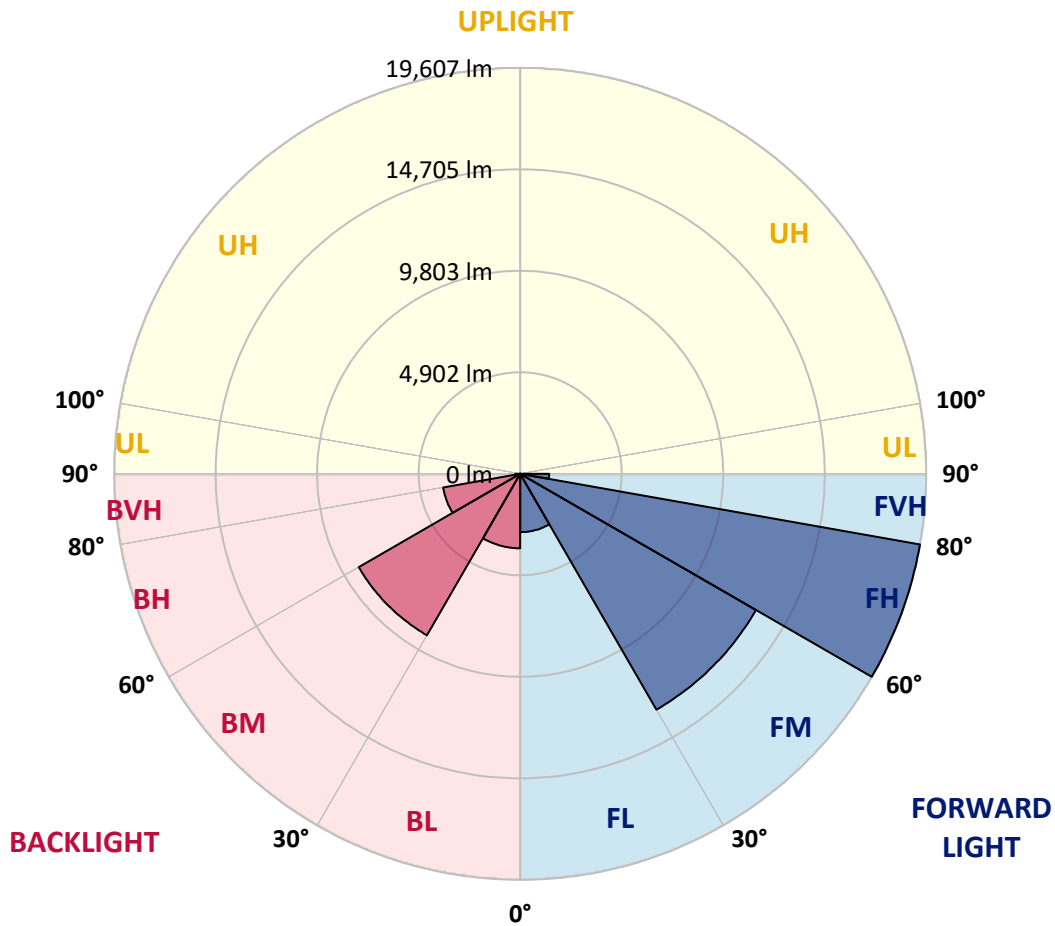
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2817.9	5.3			
FM (30°-60°)	13150.7	24.5			
FH (60°-80°)	19606.5	36.6			G5
FVH (80°-90°)	1398.4	2.6			G5
BL (0°-30°)	3595.4	6.7	B4/5000		
BM (30°-60°)	9003.1	16.8	B5		
BH (60°-80°)	3776.6	7.0	B4/5000		G4/5000
BVH (80°-90°)	223.3	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°	6126.0	6126.0	6126.0	6126.0	6126.0	6126.0	6126.0	6126.0	6126.0	6126.0	6126.0
2.5°	6032.3	6066.4	6057.8	6046.5	6046.5	6049.3	6046.5	6066.4	6086.3	6106.1	6137.4
5°	6094.8	6128.9	6111.8	6097.6	6086.3	6083.4	6074.9	6072.0	6083.4	6109.0	6151.6
7.5°	6217.0	6251.1	6225.5	6199.9	6177.2	6165.8	6154.4	6137.4	6128.9	6143.1	6202.7
10°	6353.3	6387.4	6356.2	6310.7	6273.8	6259.6	6248.2	6231.2	6219.8	6228.3	6293.7
12.5°	6489.7	6523.8	6481.2	6418.7	6370.4	6361.9	6347.7	6342.0	6339.1	6336.3	6401.6
15°	6617.6	6646.0	6592.0	6518.1	6467.0	6452.8	6438.6	6447.1	6461.3	6478.4	6552.2
17.5°	6717.0	6745.5	6665.9	6569.3	6521.0	6515.3	6506.8	6535.2	6575.0	6617.6	6708.5
20°	6808.0	6836.4	6734.1	6603.4	6546.6	6546.6	6549.4	6609.1	6665.9	6728.4	6853.4
22.5°	6935.8	6958.6	6833.5	6654.5	6572.1	6577.8	6600.5	6660.2	6731.2	6816.5	6989.8
25°	7126.2	7143.2	6989.8	6751.1	6657.4	6674.4	6694.3	6722.7	6790.9	6890.4	7123.4
27.5°	7433.1	7447.3	7245.5	6921.6	6779.5	6808.0	6836.4	6816.5	6847.7	6933.0	7231.3
30°	7865.0	7873.5	7617.8	7188.7	6987.0	7001.2	7006.9	6924.5	6864.8	6933.0	7308.0
32.5°	8376.4	8373.6	8069.5	7512.6	7222.8	7208.6	7160.3	6998.3	6859.1	6918.8	7376.2
35°	9169.2	9137.9	8745.8	7967.2	7489.9	7401.8	7288.2	7080.7	6887.5	6904.6	7435.9
37.5°	10481.9	10385.3	9842.6	8711.7	7887.7	7663.2	7495.6	7214.3	6950.0	6898.9	7506.9
40°	11962.2	11840.1	11243.4	9731.7	8484.4	8123.5	7853.6	7404.7	7052.3	6924.5	7612.1
42.5°	13718.2	13544.9	12902.7	10933.7	9240.2	8717.4	8311.1	7646.2	7202.9	7006.9	7754.1
45°	15874.8	15644.7	14735.4	12289.0	10192.1	9495.9	8953.2	8012.7	7433.1	7166.0	7967.2
47.5°	18054.2	18111.0	16818.2	13840.4	11334.3	10456.3	9757.3	8563.9	7768.4	7421.7	8311.1
50°	20369.9	20409.7	18889.5	15559.4	12630.0	11541.7	10660.9	9180.5	8234.3	7785.4	8825.3
52.5°	22177.0	22182.7	20770.5	17358.0	13979.6	12735.1	11635.5	9885.2	8774.2	8268.4	9510.1
55°	23307.9	23293.7	22088.9	19060.0	15531.0	13988.1	12715.2	10686.5	9433.4	8836.7	10371.1
57.5°	24129.1	24086.4	22998.2	20523.3	17184.7	15468.5	13937.0	11595.7	10211.9	9513.0	11504.8
60°	24441.6	24416.0	23614.8	21787.8	18923.6	17105.1	15346.3	12612.9	11095.6	10311.4	12962.4
62.5°	24560.9	24609.2	24220.0	23012.4	20784.7	18918.0	16894.9	13829.0	12090.1	11215.0	14499.6
65°	24981.5	25069.6	24990.0	24614.9	22887.4	21040.5	18949.2	15275.3	13175.5	12183.9	16105.0
67.5°	25814.0	25902.1	25936.2	26532.9	25456.0	23685.8	21512.1	17076.7	14445.6	13189.7	17312.6
70°	25794.1	25768.5	26370.9	28058.7	28672.4	27348.3	24967.3	19293.0	15960.1	14025.1	17466.0
72.5°	23478.4	23273.8	24697.3	28041.6	31349.0	31172.9	29186.7	22151.5	17267.1	14127.4	15156.0
75°	17613.8	17068.2	19582.8	25271.3	31795.1	33343.7	31869.0	23924.5	16957.4	12482.2	10547.2
77.5°	7532.5	6984.1	9947.7	18707.7	28456.5	31170.0	29408.4	20872.8	13536.4	8254.2	5179.8
80°	1971.9	1969.1	3006.2	8481.5	19352.7	23018.1	20193.7	13479.5	7734.3	2949.4	1429.2
82.5°	815.5	795.6	1105.3	3298.8	9456.1	12916.9	10541.5	6012.4	2793.1	798.4	474.5
85°	304.0	301.2	537.0	1139.4	3335.8	5327.6	3855.8	1537.2	696.1	389.3	213.1
87.5°	85.2	82.4	116.5	395.0	812.6	1233.2	659.2	252.9	196.1	153.4	62.5
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°	6126.0	6126.0	6126.0	6126.0	6126.0	6126.0	6126.0	6126.0	6126.0	6126.0	6126.0
2.5°	6145.9	6160.1	6185.7	6205.6	6231.2	6259.6	6299.4	6324.9	6350.5	6367.5	6356.2
5°	6171.5	6202.7	6268.1	6333.5	6410.2	6481.2	6563.6	6623.3	6671.6	6685.8	6691.5
7.5°	6228.3	6279.5	6390.3	6501.1	6623.3	6739.8	6859.1	6961.4	7043.8	7075.1	7077.9
10°	6327.8	6396.0	6552.2	6708.5	6870.5	7049.5	7202.9	7350.7	7467.2	7515.5	7518.3
12.5°	6452.8	6538.0	6742.6	6958.6	7183.0	7430.2	7629.1	7811.0	7955.9	8021.2	8021.2
15°	6614.7	6725.6	6987.0	7276.8	7606.4	7950.2	8203.1	8404.8	8566.8	8646.3	8640.7
17.5°	6790.9	6938.7	7268.3	7705.8	8177.5	8629.3	8924.8	9072.5	9240.2	9316.9	9314.1
20°	6961.4	7143.2	7614.9	8251.4	8879.3	9359.5	9598.2	9638.0	9649.3	9657.9	9680.6
22.5°	7137.6	7381.9	8049.6	8939.0	9612.4	9944.9	9978.9	9808.5	9569.8	9459.0	9490.2
25°	7330.8	7654.7	8617.9	9697.7	10243.2	10283.0	10021.6	9606.7	9154.9	8947.5	8978.8
27.5°	7518.3	7970.1	9299.9	10422.2	10697.8	10348.3	9785.7	9197.6	8652.0	8433.2	8458.8
30°	7705.8	8330.9	10052.8	11055.8	10905.2	10186.4	9413.5	8757.2	8208.8	7978.6	8004.2
32.5°	7896.2	8751.5	10919.4	11513.3	10868.3	9842.6	8950.4	8262.8	7779.7	7538.2	7569.5
35°	8112.2	9268.6	11740.6	11763.3	10621.1	9336.8	8339.5	7671.7	7251.2	7058.0	7100.6
37.5°	8393.5	9925.0	12465.2	11825.9	10189.2	8595.2	7580.8	6972.8	6626.1	6538.0	6600.5
40°	8742.9	10714.9	13019.2	11726.4	9549.9	7694.5	6751.1	6265.3	6069.2	6089.1	6157.3
42.5°	9197.6	11598.5	13408.5	11470.7	8660.5	6765.3	6023.7	5807.8	5901.6	5981.1	6055.0
45°	9788.6	12516.3	13650.0	11035.9	7654.7	5978.3	5594.7	5645.8	5716.9	5725.4	5782.2
47.5°	10544.4	13445.4	13809.1	10379.6	6629.0	5424.2	5321.9	5333.3	5319.1	5259.4	5304.9
50°	11487.7	14349.0	13951.2	9510.1	5756.6	5077.6	4941.2	4901.4	4705.3	4512.1	4537.7
52.5°	12561.8	15178.7	14010.9	8430.4	5077.6	4787.7	4566.1	4316.1	3949.5	3889.9	3909.7
55°	13755.2	15945.9	13857.4	7103.5	4506.4	4415.5	4080.2	3779.0	3739.3	3688.1	3696.6
57.5°	15181.5	16772.7	13544.9	5623.1	3921.1	3980.8	3654.0	3688.1	3617.1	3537.5	3523.3
60°	16741.5	17628.0	12996.5	4273.4	3315.9	3438.1	3543.2	3540.4	3520.5	3455.1	3432.4
62.5°	18145.1	18190.6	11916.8	3273.3	2784.6	3017.6	3304.5	3301.7	3284.6	3247.7	3233.5
65°	18980.5	18105.3	10115.3	2577.1	2347.0	2670.9	2980.6	3003.3	3006.2	3003.3	3003.3
67.5°	18832.7	17108.0	7643.3	2051.5	1986.1	2318.6	2659.5	2690.8	2713.5	2719.2	2724.9
70°	17162.0	14917.3	4983.8	1636.6	1665.1	2008.9	2355.5	2386.8	2406.7	2429.4	2440.8
72.5°	13377.2	10967.8	2852.8	1324.1	1383.8	1741.8	2054.3	2091.3	2102.6	2145.2	2162.3
75°	8151.9	6449.9	1540.0	1042.8	1136.6	1488.9	1756.0	1798.6	1818.5	1869.6	1875.3
77.5°	3875.7	2793.1	878.0	812.6	914.9	1216.1	1483.2	1531.5	1477.5	1505.9	1483.2
80°	1309.9	1037.1	554.1	619.4	699.0	949.0	1187.7	1236.0	1122.3	1116.7	1105.3
82.5°	457.5	420.5	352.3	412.0	451.8	679.1	897.9	960.4	835.4	832.5	792.7
85°	179.0	170.5	196.1	224.5	269.9	417.7	591.0	622.3	514.3	414.8	409.2
87.5°	36.9	39.8	48.3	51.1	82.4	144.9	213.1	261.4	207.4	176.2	162.0
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)