

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: P884851

Luminaire Tested: **NAV-SB5D-835-U-T4FT**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P884851
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-24)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB5D-835-U-T4FT
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 80 CRI, 3500K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV
FORWARD THROW OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 43062 lumens
Efficiency: N/A
Efficacy: 118.0 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1.5' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B4 - U0 - G5

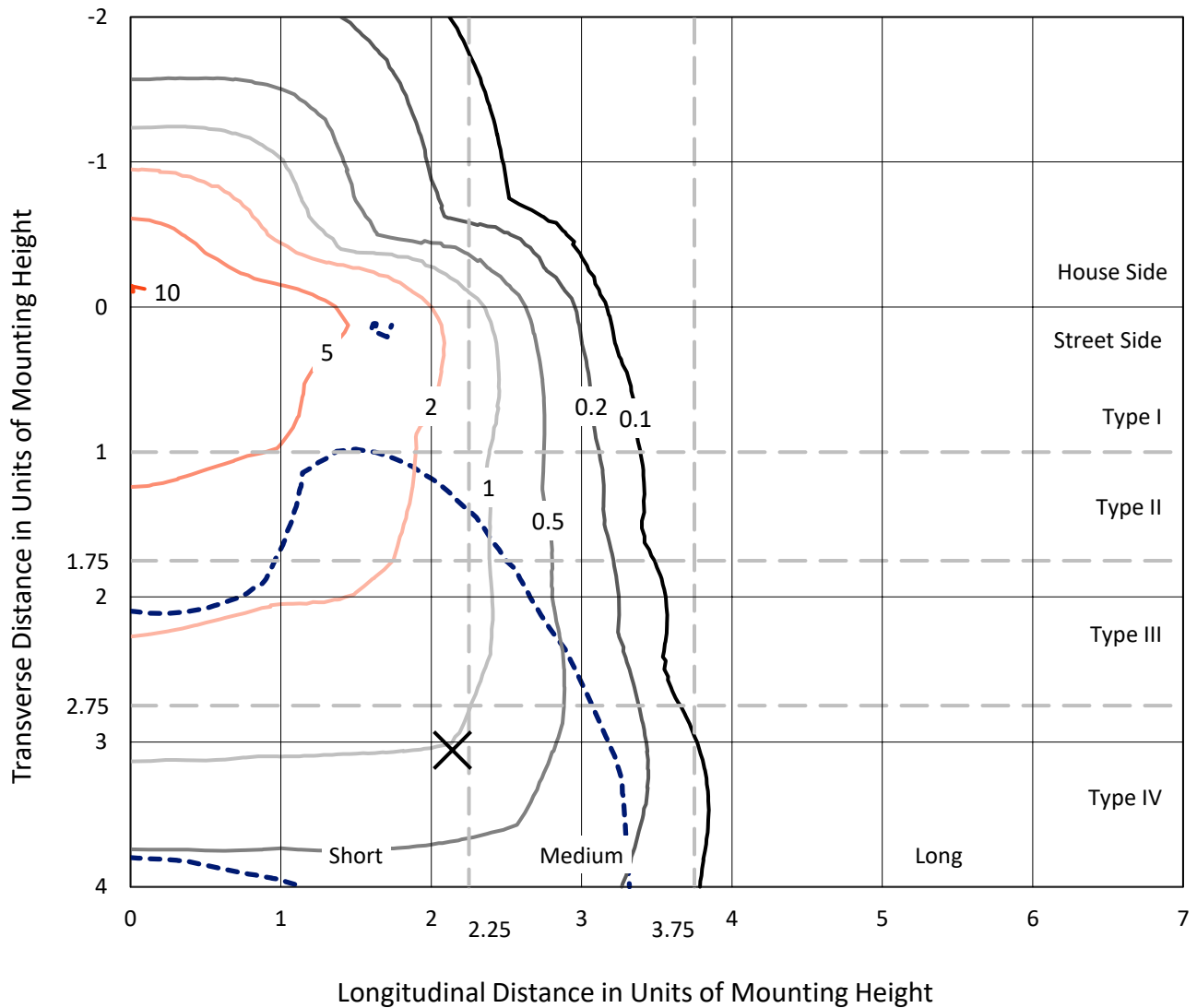
Input Watts (W): 364.9
Input Voltage (V): 120.0
Input Current (Ain): 3.094
Voltage Rise (V): NR
Power Factor: 0.998
Total Harmonic Distortion (THDi): 3.28
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

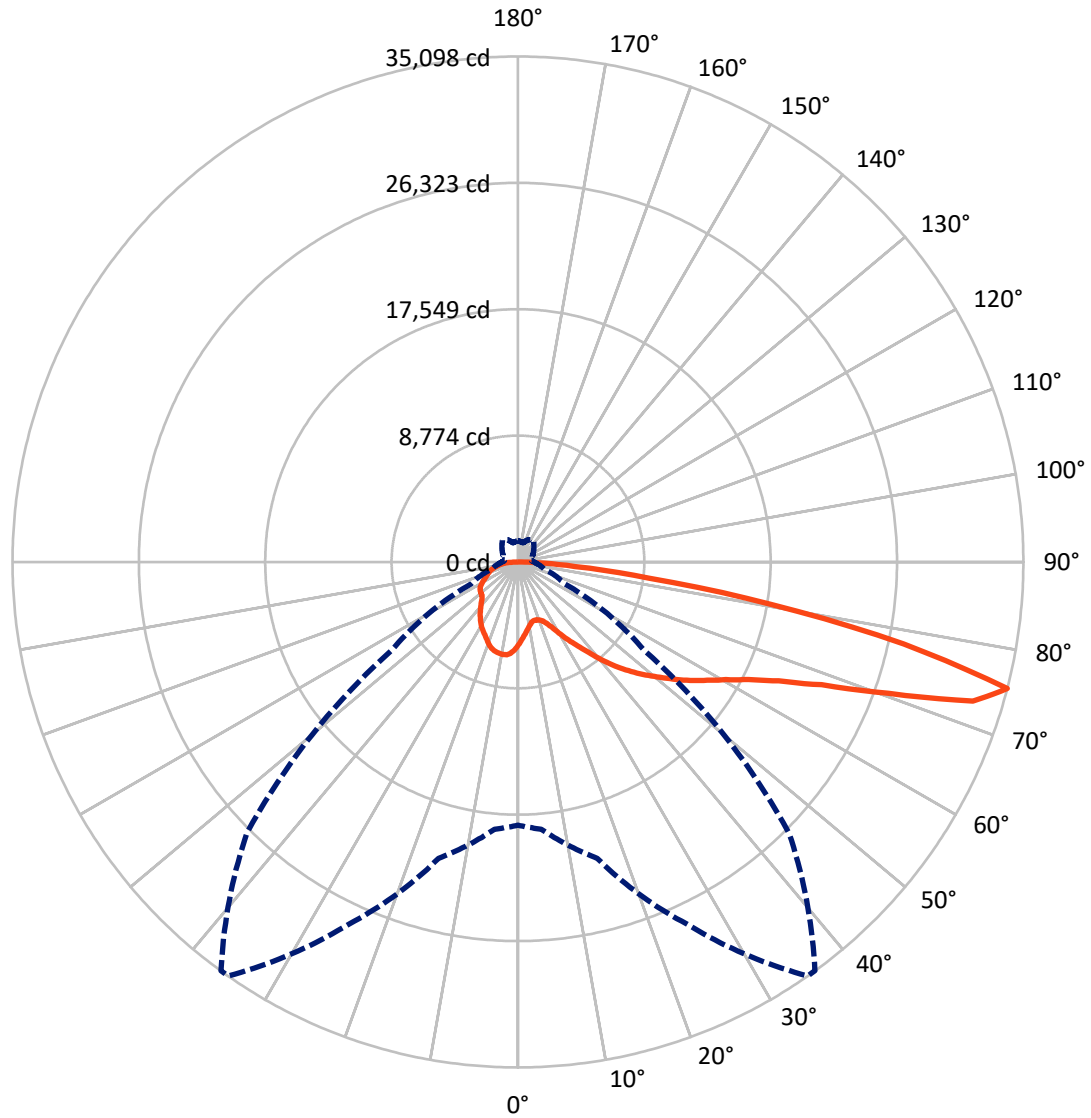
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 10.1 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 35-Deg Lateral - - - Horizontal Cone Through 75-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	10247.7	0.0	10247.7
	% Fixture	23.8	0.0	23.8
Street Side	Lumens	32814.3	0.0	32814.3
	% Fixture	76.2	0.0	76.2
Total	Lumens	43062.0	0.0	43062.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	543.3	1.3
10°-20°	1567.1	3.6
20°-30°	2631.6	6.1
30°-40°	4089.9	9.5
40°-50°	6070.5	14.1
50°-60°	8380.6	19.5
60°-70°	10167.6	23.6
70°-80°	8402.8	19.5
80°-90°	1208.6	2.8
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°	43062.0	100.0
0°-180°	43062.0	100.0

Coefficient of Utilization



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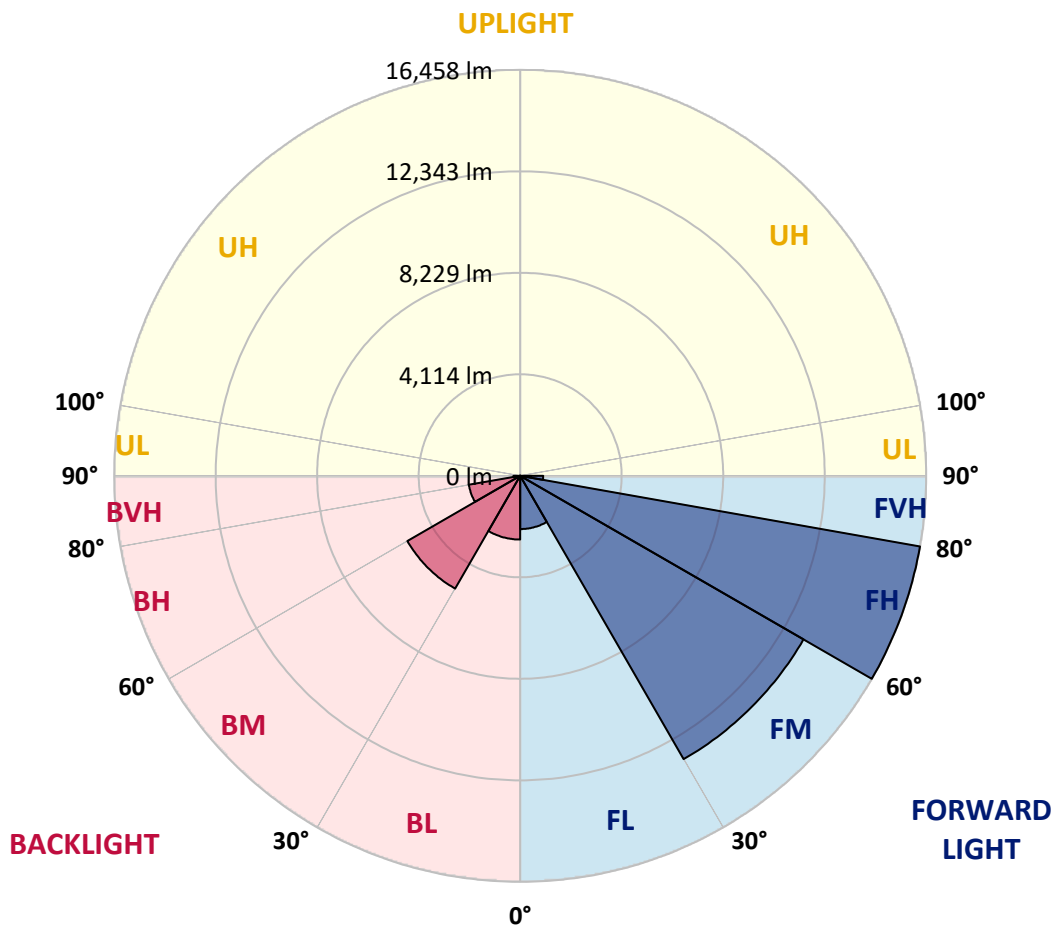
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2159.5	5.0			
FM (30°-60°)	13260.8	30.8			
FH (60°-80°)	16457.7	38.2			G5
FVH (80°-90°)	936.4	2.2			G5
BL (0°-30°)	2582.6	6.0	B4/5000		
BM (30°-60°)	5280.2	12.3	B4/8500		
BH (60°-80°)	2112.8	4.9	B3/2500		G3/2500
BVH (80°-90°)	272.1	0.6			G3/500
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 Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	36°	45°	55°	65°	75°	85°
0°	5738.3	5738.3	5738.3	5738.3	5738.3	5738.3	5738.3	5738.3	5738.3	5738.3	5738.3
2.5°	5291.3	5323.9	5337.9	5330.9	5365.8	5361.2	5410.1	5470.6	5554.4	5635.9	5754.6
5°	4884.0	4918.9	4949.1	4977.1	5044.6	5065.5	5142.4	5258.8	5412.4	5568.4	5763.9
7.5°	4504.5	4534.8	4581.3	4632.5	4746.6	4767.6	4895.6	5077.2	5291.3	5519.5	5789.5
10°	4194.9	4225.2	4274.0	4332.2	4474.2	4499.9	4662.8	4904.9	5184.3	5472.9	5817.5
12.5°	4062.2	4071.5	4099.5	4157.7	4281.0	4297.3	4476.6	4753.6	5079.5	5438.0	5859.4
15°	4055.2	4073.8	4076.2	4106.4	4208.9	4215.8	4381.1	4655.8	5014.3	5431.0	5922.2
17.5°	4125.1	4139.0	4118.1	4136.7	4222.8	4234.5	4364.8	4609.3	4993.4	5461.3	6029.3
20°	4311.3	4322.9	4260.1	4234.5	4297.3	4306.6	4434.7	4639.5	5014.3	5524.1	6176.0
22.5°	4707.0	4714.0	4560.4	4455.6	4460.3	4464.9	4576.7	4762.9	5095.8	5638.2	6362.2
25°	5323.9	5319.3	5074.8	4872.3	4755.9	4730.3	4804.8	4963.1	5233.1	5789.5	6602.0
27.5°	6045.6	6010.7	5766.2	5463.6	5209.9	5172.6	5156.3	5223.8	5428.7	5989.7	6895.3
30°	6860.4	6827.8	6564.7	6169.0	5817.5	5756.9	5603.3	5568.4	5719.7	6262.1	7302.7
32.5°	7754.3	7733.3	7419.1	6939.5	6469.3	6399.4	6141.0	6047.9	6166.6	6674.1	7870.7
35°	8503.9	8485.2	8224.5	7731.0	7156.0	7069.9	6806.8	6702.1	6762.6	7202.6	8613.3
37.5°	9181.3	9172.0	8948.5	8559.7	7966.1	7861.4	7565.7	7530.8	7519.2	7898.6	9514.2
40°	9809.8	9786.5	9553.8	9348.9	8908.9	8813.5	8552.7	8522.5	8434.0	8755.3	10533.8
42.5°	10505.9	10445.3	10107.8	10012.3	9893.6	9814.5	9658.5	9663.2	9467.6	9721.4	11614.0
45°	11073.9	11039.0	10692.1	10636.2	10764.3	10731.7	10866.7	10901.6	10522.2	10734.0	12736.0
47.5°	11683.8	11651.2	11357.9	11318.3	11665.2	11674.5	12151.7	12163.3	11551.1	11786.2	13860.4
50°	12435.7	12389.1	12098.2	12147.0	12535.8	12570.7	13443.7	13364.5	12498.6	12854.7	14975.5
52.5°	12931.6	12959.5	12896.6	12975.8	13506.5	13539.1	14714.7	14512.2	13436.7	13909.3	16069.6
55°	13297.0	13352.9	13548.4	13730.0	14530.8	14563.4	15913.6	15604.0	14214.2	14887.0	17098.5
57.5°	13767.3	13688.1	14053.6	14407.4	15503.9	15590.0	17079.9	16656.2	14903.3	15729.7	17803.9
60°	14442.4	14386.5	14670.5	15194.3	16593.4	16730.7	18313.7	17603.7	15408.4	16397.8	17941.2
62.5°	15811.2	15671.5	15715.7	16179.0	17966.8	18148.4	19705.8	18430.1	15659.9	16658.5	17205.6
65°	17857.4	17617.6	17394.2	17715.4	19901.3	20080.6	21277.1	19079.6	15566.7	16153.4	15252.5
67.5°	20434.4	20197.0	19922.3	20224.9	22750.7	22892.7	23216.3	19445.0	14833.5	14207.2	11800.2
70°	22559.8	22471.3	22799.6	24045.0	27301.8	27306.4	25702.5	19142.4	12824.5	10072.9	6827.8
72.5°	22278.1	22224.6	23954.2	27804.6	33037.7	32914.3	28056.0	16851.8	8638.9	4544.1	2558.4
75°	18276.4	18623.3	21302.7	27737.1	35097.9	35081.6	26615.0	10713.1	3573.3	1883.3	1322.3
77.5°	9800.5	10349.9	13830.1	20478.6	27399.5	27811.6	18711.8	3747.9	1534.1	1205.9	914.9
80°	3196.2	3675.8	5512.5	10426.7	17803.9	17727.0	8019.7	1471.2	1049.9	854.3	633.2
82.5°	1357.2	1413.0	2462.9	4923.5	9137.1	8995.1	2553.7	845.0	737.9	584.3	391.1
85°	530.8	593.6	1087.1	2276.7	3957.5	3871.3	921.9	419.0	472.6	381.8	232.8
87.5°	174.6	211.8	388.8	779.9	1231.5	1187.2	225.8	144.3	204.9	174.6	83.8
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°	5738.3	5738.3	5738.3	5738.3	5738.3	5738.3	5738.3	5738.3	5738.3	5738.3	5738.3
2.5°	5787.2	5824.4	5868.7	5933.8	5989.7	6036.3	6085.2	6115.4	6127.1	6162.0	6159.7
5°	5829.1	5910.6	6020.0	6127.1	6231.8	6294.7	6350.5	6378.5	6404.1	6422.7	6427.4
7.5°	5898.9	6003.7	6176.0	6315.6	6404.1	6455.3	6492.5	6483.2	6492.5	6497.2	6504.2
10°	5959.5	6106.1	6311.0	6443.7	6511.2	6513.5	6504.2	6471.6	6455.3	6457.6	6462.3
12.5°	6031.6	6194.6	6415.7	6527.5	6546.1	6494.9	6455.3	6399.4	6378.5	6369.2	6364.5
15°	6129.4	6315.6	6529.8	6571.7	6525.1	6460.0	6392.4	6301.7	6255.1	6217.9	6229.5
17.5°	6248.1	6453.0	6618.3	6588.0	6487.9	6380.8	6271.4	6134.0	6038.6	5999.0	6001.4
20°	6413.4	6597.3	6685.8	6553.1	6401.8	6238.8	6052.6	5885.0	5796.5	5756.9	5752.3
22.5°	6613.6	6790.5	6750.9	6492.5	6278.4	6017.7	5784.9	5661.5	5617.3	5589.3	5594.0
25°	6853.4	7004.7	6797.5	6404.1	6075.9	5724.3	5545.1	5505.5	5484.6	5463.6	5463.6
27.5°	7165.3	7246.8	6832.4	6273.7	5759.3	5412.4	5347.2	5354.2	5347.2	5312.3	5319.3
30°	7577.4	7561.1	6865.0	6061.9	5396.1	5130.7	5135.4	5165.6	5170.3	5147.0	5158.7
32.5°	8119.8	7954.5	6881.3	5787.2	5049.2	4884.0	4888.6	4921.2	4944.5	4904.9	4923.5
35°	8776.2	8413.1	6855.7	5442.7	4781.5	4648.8	4613.9	4623.2	4630.2	4593.0	4618.6
37.5°	9542.1	8927.5	6741.6	5060.9	4560.4	4418.4	4343.9	4281.0	4243.8	4208.9	4232.1
40°	10382.5	9488.6	6532.1	4688.4	4313.6	4173.9	4062.2	3943.5	3817.8	3771.2	3792.2
42.5°	11262.4	10065.9	6278.4	4332.2	4029.6	3915.5	3796.8	3624.6	3436.0	3340.6	3352.2
45°	12175.0	10657.2	6029.3	3980.7	3738.6	3689.7	3552.4	3345.2	3140.4	3019.3	3010.0
47.5°	13068.9	11215.9	5663.8	3626.9	3466.3	3519.8	3412.7	3221.8	2993.7	2802.8	2781.9
50°	13923.2	11739.7	5065.5	3268.4	3245.1	3468.6	3366.2	3091.5	2830.7	2586.3	2565.4
52.5°	14770.6	12163.3	4299.7	2942.5	3126.4	3454.6	3305.6	3003.0	2684.1	2428.0	2400.1
55°	15489.9	12382.2	3561.7	2663.1	2954.1	3335.9	3233.5	2898.3	2476.9	2204.5	2181.3
57.5°	15899.6	12205.2	2947.1	2388.4	2716.7	3140.4	3110.1	2674.8	2230.1	2020.6	1992.7
60°	15722.7	11488.2	2444.3	2148.7	2490.9	2928.5	2895.9	2453.6	2041.6	1843.7	1815.8
62.5°	14747.3	10121.8	2046.2	1939.2	2286.0	2712.0	2681.8	2283.7	1897.2	1706.4	1676.1
65°	12782.6	8233.8	1736.6	1764.6	2078.8	2451.3	2495.5	2141.7	1783.2	1596.9	1566.7
67.5°	9749.3	5964.1	1494.5	1613.2	1876.3	2195.2	2323.3	2039.3	1687.7	1510.8	1482.9
70°	5556.7	3387.1	1289.7	1466.6	1697.0	1957.8	2190.6	1957.8	1585.3	1438.6	1420.0
72.5°	2106.8	1555.0	1115.1	1319.9	1524.8	1757.6	2043.9	1829.7	1466.6	1357.2	1338.5
75°	1124.4	947.5	938.1	1147.7	1326.9	1562.0	1860.0	1704.0	1378.1	1434.0	1480.6
77.5°	765.9	670.4	784.5	982.4	1110.4	1345.5	1664.5	1513.1	1194.2	1189.6	1096.4
80°	530.8	474.9	637.8	791.5	859.0	1131.4	1452.6	1299.0	973.1	907.9	868.3
82.5°	318.9	309.6	477.2	591.3	607.6	873.0	1203.5	1089.5	796.1	693.7	698.4
85°	174.6	183.9	305.0	346.9	353.8	609.9	942.8	842.7	612.2	514.5	519.1
87.5°	48.9	62.9	111.7	137.3	169.9	316.6	561.0	500.5	307.3	214.2	214.2
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)