

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: P969219

Luminaire Tested: **NAV-SB5D-722-U-T2R**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P969219
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-3)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB5D-722-U-T2R
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 70 CRI, 2200K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II
ROADWAY OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 44333.3 lumens
Efficiency: N/A
Efficacy: 121.5 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B3 - U0 - G4

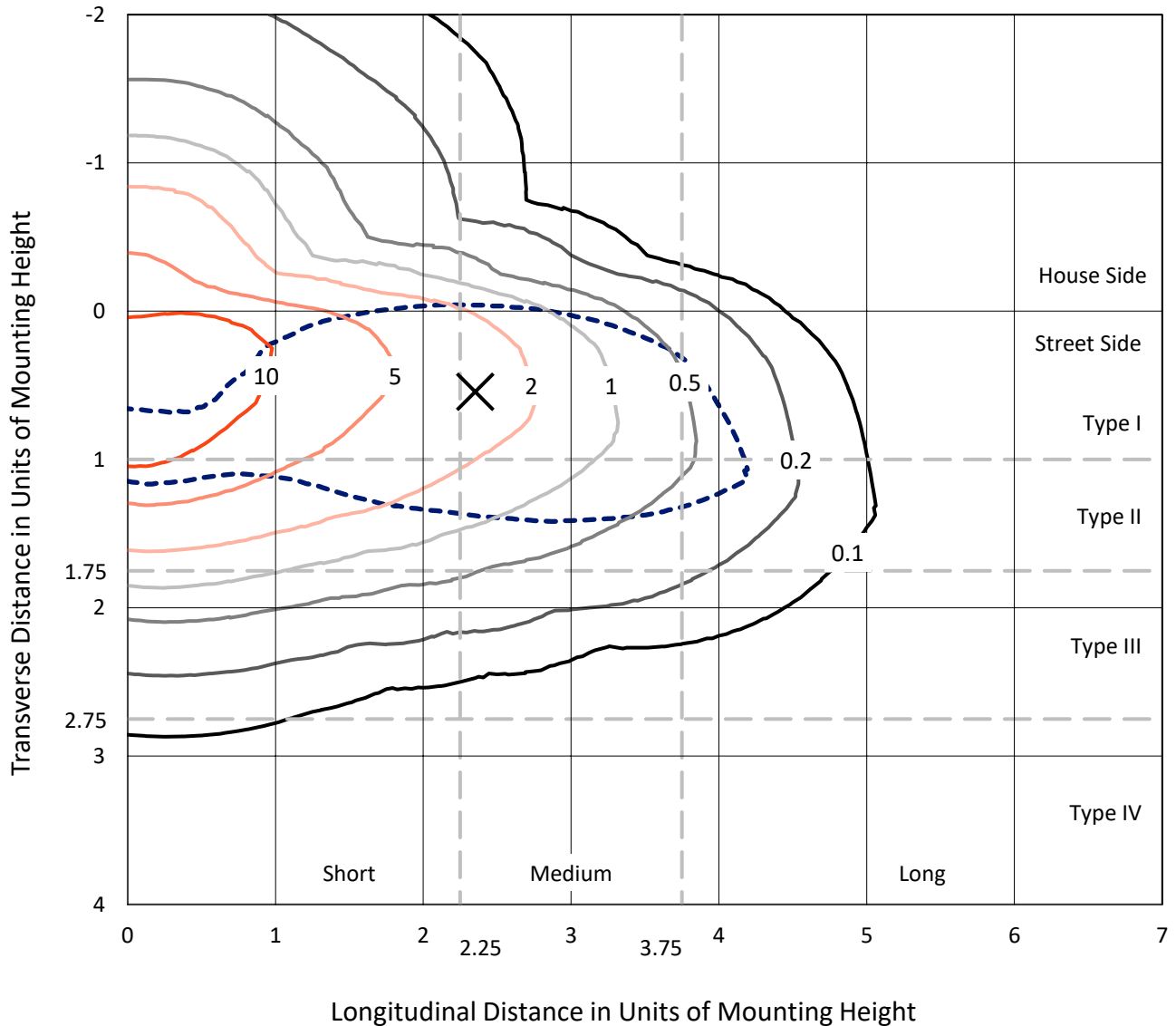
Input Watts (W): 364.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

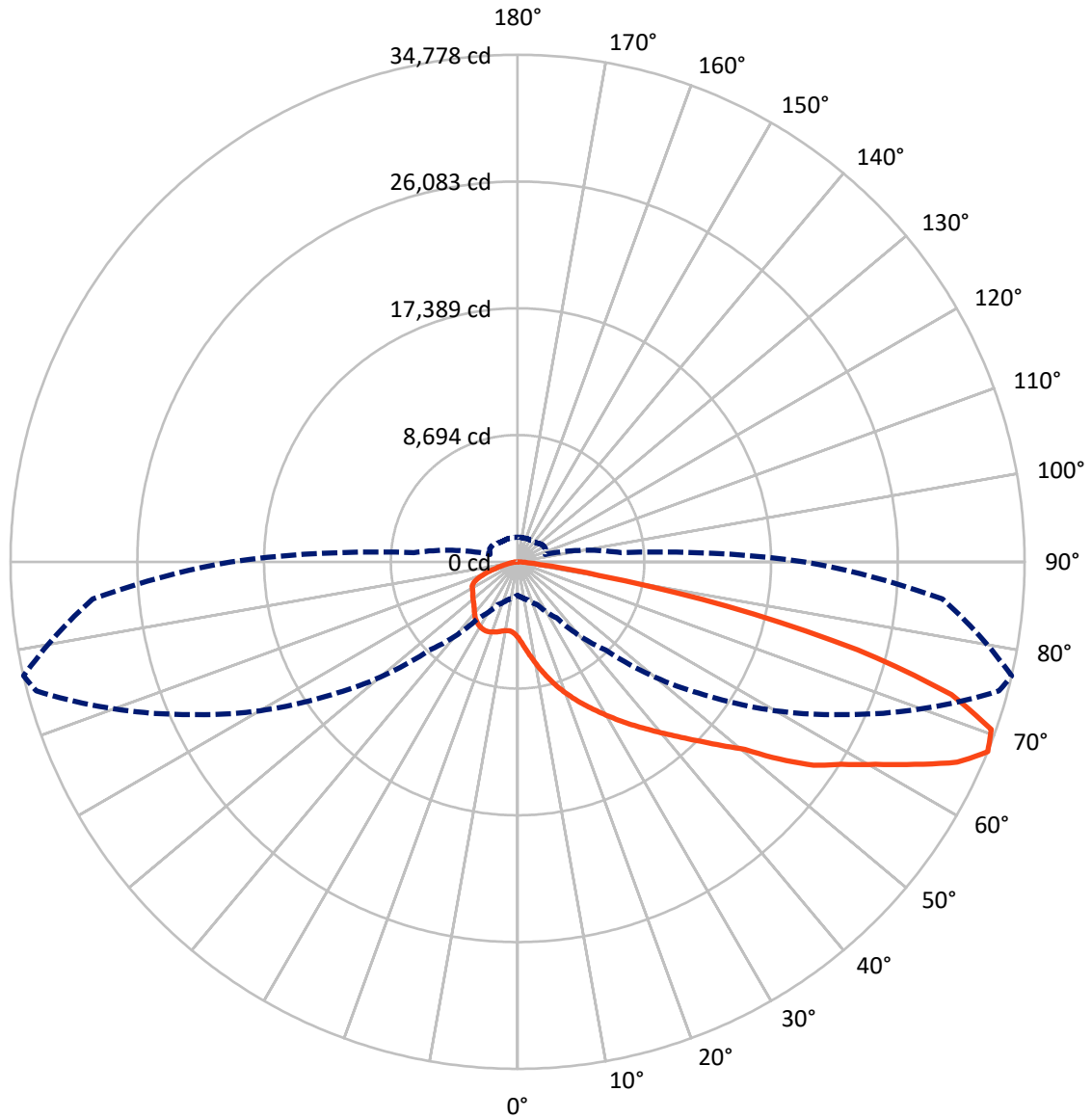
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 16.2 fc
 Type II - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 77-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	8386.1	0.0	8386.1
	% Fixture	18.9	0.0	18.9
Street Side	Lumens	35947.2	0.0	35947.2
	% Fixture	81.1	0.0	81.1
Total	Lumens	44333.3	0.0	44333.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	557.6	1.3
10°-20°	2003.1	4.5
20°-30°	3782.0	8.5
30°-40°	6092.7	13.7
40°-50°	8333.7	18.8
50°-60°	9400.4	21.2
60°-70°	8774.1	19.8
70°-80°	4809.7	10.8
80°-90°	580.2	1.3
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°	44333.3	100.0
0°-180°	44333.3	100.0

Coefficient of Utilization

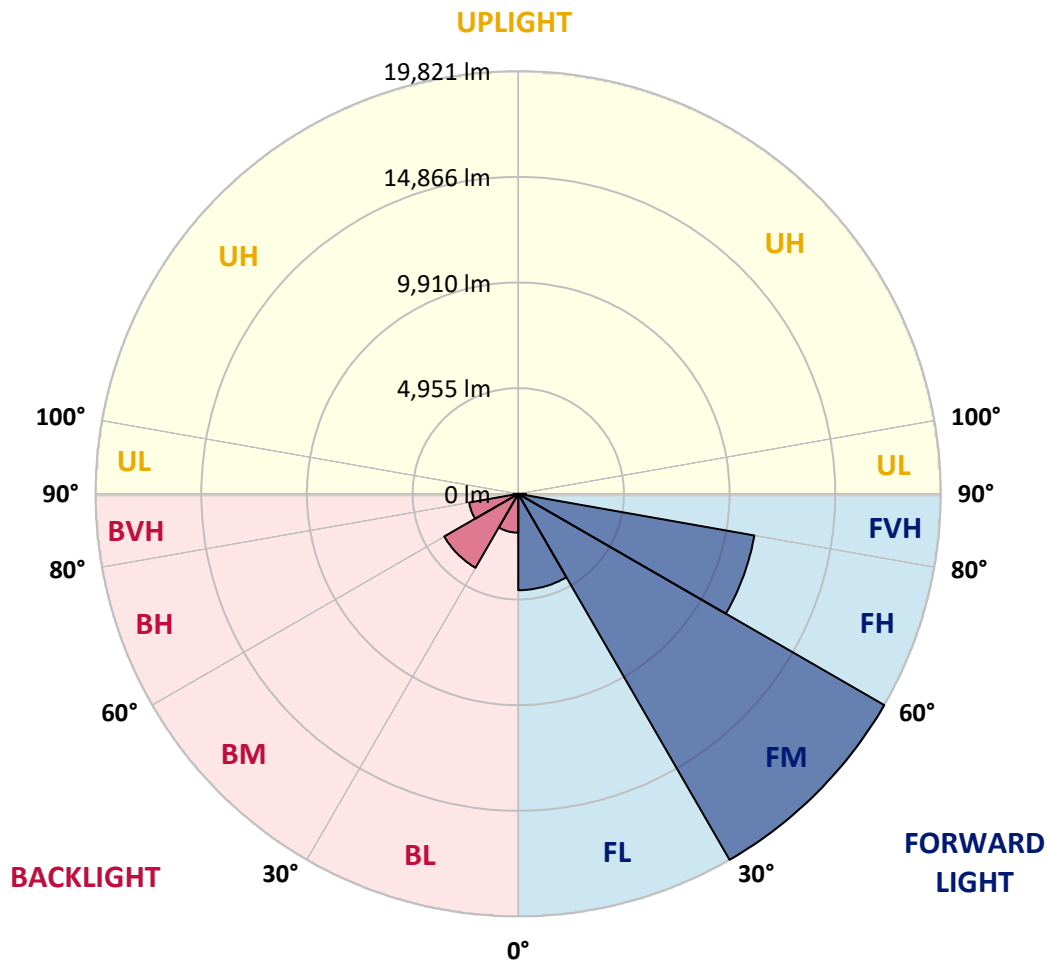


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	4519.2	10.2			
FM (30°-60°)	19820.9	44.7			
FH (60°-80°)	11244.2	25.4			G4/12000
FVH (80°-90°)	362.8	0.8			G3/500
BL (0°-30°)	1823.3	4.1	B3/2500		
BM (30°-60°)	4005.8	9.0	B3/5000		
BH (60°-80°)	2339.6	5.3	B3/2500		G3/2500
BVH (80°-90°)	217.3	0.5			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 II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77°	85°
0°	5201.7	5201.7	5201.7	5201.7	5201.7	5201.7	5201.7	5201.7	5201.7	5201.7	5201.7
2.5°	6513.0	6558.8	6501.5	6501.5	6309.3	6208.6	6016.3	5869.9	5606.7	5560.9	5387.0
5°	7698.4	7755.6	7675.5	7641.2	7414.6	7206.4	6883.7	6565.6	6096.5	6048.4	5638.7
7.5°	8616.0	8689.3	8618.3	8581.7	8380.3	8146.9	7769.3	7325.4	6664.0	6570.1	5977.5
10°	9364.4	9375.8	9352.9	9366.7	9208.8	9016.5	8629.8	8112.6	7286.4	7158.3	6387.1
12.5°	9787.7	9840.4	9886.1	9968.5	9941.1	9822.1	9474.3	8856.3	7945.5	7780.8	6833.4
15°	9986.9	10078.4	10181.3	10371.3	10524.6	10554.4	10288.9	9655.0	8616.0	8417.0	7284.2
17.5°	10057.8	10144.7	10307.2	10581.9	10911.4	11133.3	11014.3	10430.8	9279.7	9050.9	7757.9
20°	10417.1	10442.3	10540.7	10801.6	11158.6	11526.9	11616.2	11176.8	9936.5	9677.9	8247.7
22.5°	11186.0	11135.7	11163.1	11282.1	11538.4	11895.4	12099.1	11835.9	10611.6	10314.1	8741.9
25°	12456.1	12309.6	12163.2	12025.9	12156.3	12357.7	12588.8	12495.0	11318.8	10941.2	9240.8
27.5°	14060.3	13881.8	13559.1	13108.3	12950.4	13021.4	13124.3	13106.1	11973.2	11591.0	9755.7
30°	15639.3	15431.1	15046.6	14394.4	13977.9	13790.2	13712.4	13659.9	12685.0	12277.6	10275.2
32.5°	16900.3	16735.5	16358.0	15627.9	15023.7	14703.3	14444.8	14257.1	13428.7	13021.4	10824.4
35°	18003.3	17850.0	17417.5	16621.1	15964.3	15623.4	15284.6	14884.1	14202.2	13790.2	11414.8
37.5°	19010.3	18856.9	18264.2	17435.8	16774.4	16538.7	16236.6	15556.9	14978.0	14588.9	12039.5
40°	19646.5	19612.1	19058.3	18120.1	17433.5	17316.8	17216.1	16337.4	15838.4	15476.9	12726.1
42.5°	19808.9	19884.5	19445.1	18673.9	18019.4	17925.5	18161.3	17220.7	16804.2	16458.6	13504.2
45°	19417.6	19635.0	19346.7	18822.6	18435.9	18385.5	18998.8	18186.4	17872.9	17557.1	14442.5
47.5°	18426.7	18795.1	18676.1	18602.9	18548.0	18765.4	19735.7	19211.7	19083.4	18808.9	15513.5
50°	16426.5	17124.6	17332.9	17795.1	18326.0	19060.6	20406.2	20330.7	20497.7	20220.9	16817.9
52.5°	12968.7	13929.9	15138.2	16296.2	17644.0	18962.2	21143.1	21937.2	22642.0	22491.0	18891.3
55°	10705.4	11138.0	12067.0	14190.7	16321.3	18548.0	21474.9	23234.8	24770.4	24635.3	20463.4
57.5°	8966.2	9352.9	9925.1	11698.6	14321.2	17607.4	21680.9	24026.5	26228.1	26214.4	22015.1
60°	7101.1	7510.7	8096.6	9352.9	11984.7	15982.6	21635.1	24928.2	28088.6	28203.0	23907.5
62.5°	4995.7	5446.5	6096.5	7268.2	9597.8	13877.3	20701.4	25580.4	30278.6	30589.9	26184.5
65°	3283.9	3581.5	4071.2	5082.7	7151.4	11169.9	18918.7	25665.1	32622.1	33148.4	28322.0
67.5°	2302.1	2416.6	2705.0	3254.2	4714.2	8565.7	16078.8	24788.6	34185.1	34777.7	29248.8
70°	1796.4	1853.6	2000.1	2219.8	2961.2	5760.1	12321.1	22509.3	33850.9	34468.8	28280.8
72.5°	1551.5	1606.5	1661.4	1688.9	1986.3	3556.2	8346.1	18820.3	30704.3	31123.1	24589.5
75°	1407.4	1421.2	1466.9	1457.8	1514.9	2306.8	4817.2	13712.4	24225.7	24081.5	18152.0
77.5°	1183.2	1201.4	1276.9	1265.6	1345.6	1576.8	2501.3	8849.4	15705.7	14726.3	10103.5
80°	1002.3	1011.5	1093.9	1080.1	1169.4	1142.0	1276.9	4510.5	6661.7	5643.3	2913.3
82.5°	347.9	430.2	835.3	860.5	892.5	691.2	736.9	1839.9	2034.4	1558.4	611.0
85°	169.3	180.8	425.7	604.1	601.9	347.9	359.3	656.8	640.7	503.5	203.7
87.5°	27.5	34.3	50.3	235.7	187.7	91.5	123.6	128.1	132.7	114.4	45.8
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°	5201.7	5201.7	5201.7	5201.7	5201.7	5201.7	5201.7	5201.7	5201.7	5201.7	5201.7
2.5°	5258.9	5144.5	4904.2	4682.2	4508.3	4341.2	4247.4	4167.2	4121.5	4112.4	4112.4
5°	5400.7	5165.1	4727.9	4359.5	4119.3	3940.7	3846.9	3787.4	3757.6	3739.3	3737.0
7.5°	5604.4	5258.9	4636.4	4217.7	3965.9	3837.7	3789.7	3780.5	3778.3	3780.5	3787.4
10°	5886.0	5412.2	4627.3	4183.3	3972.8	3901.9	3899.5	3901.9	3911.0	3913.2	3915.6
12.5°	6190.3	5570.2	4663.9	4213.1	4059.7	4020.9	4014.0	4011.6	4018.5	4023.1	4025.4
15°	6522.1	5778.3	4725.7	4277.1	4155.9	4114.7	4107.8	4094.1	4091.8	4089.4	4087.2
17.5°	6863.1	5984.4	4794.3	4345.8	4217.7	4160.4	4135.3	4103.2	4078.1	4071.2	4078.1
20°	7208.6	6188.0	4842.4	4380.1	4222.2	4142.1	4091.8	4036.9	3993.4	3968.2	3977.3
22.5°	7577.1	6400.8	4872.1	4371.0	4181.0	4071.2	3979.7	3915.6	3849.2	3805.7	3808.0
25°	7936.4	6586.2	4869.9	4322.9	4100.9	3961.3	3844.6	3762.3	3670.7	3624.9	3624.9
27.5°	8281.9	6753.2	4812.7	4238.3	3986.5	3830.8	3691.3	3592.9	3503.7	3460.2	3457.8
30°	8638.9	6892.8	4723.4	4114.7	3851.4	3679.9	3526.5	3441.8	3361.8	3320.6	3318.2
32.5°	8993.7	7021.0	4597.5	3961.3	3695.8	3531.1	3380.0	3302.2	3254.2	3254.2	3256.5
35°	9369.0	7110.2	4430.5	3782.9	3531.1	3373.2	3254.2	3208.5	3203.8	3176.4	3169.5
37.5°	9764.9	7167.4	4226.8	3599.8	3368.7	3219.8	3183.2	3128.3	3082.6	3023.0	3013.9
40°	10181.3	7224.7	3981.9	3409.8	3197.0	3114.6	3098.6	3025.4	2894.9	2748.4	2727.8
42.5°	10687.2	7263.6	3727.9	3219.8	3016.2	2988.7	3011.7	2885.8	2677.5	2567.6	2570.0
45°	11272.9	7327.6	3494.4	3032.3	2830.8	2830.8	2927.0	2762.2	2590.6	2521.9	2533.3
47.5°	12032.8	7476.5	3277.0	2826.2	2659.2	2705.0	2739.3	2613.4	2517.3	2432.6	2430.4
50°	13131.2	7833.4	3052.8	2618.0	2528.8	2620.3	2572.2	2499.0	2386.8	2318.2	2311.4
52.5°	14495.1	8043.9	2853.7	2430.4	2416.6	2508.2	2439.5	2370.8	2286.2	2194.6	2176.3
55°	15424.2	8082.8	2686.6	2293.0	2341.1	2332.0	2306.8	2245.0	2199.2	2077.9	2080.2
57.5°	16463.2	8160.6	2549.4	2210.6	2293.0	2192.4	2183.1	2130.6	2071.0	1988.7	1961.2
60°	17705.8	8281.9	2430.4	2178.6	2251.8	2100.8	2055.0	2034.4	1975.0	1933.8	1945.1
62.5°	19060.6	8391.8	2309.0	2183.1	2203.8	2011.6	1942.9	1936.0	1899.4	1885.7	1885.7
65°	19985.1	8092.0	2158.0	2178.6	2128.3	1920.0	1833.0	1830.8	1801.0	1796.4	1794.2
67.5°	19662.5	7142.3	1954.4	2114.6	2050.5	1828.5	1732.4	1723.2	1684.3	1686.6	1686.6
70°	18046.8	5787.6	1672.9	1956.6	1954.4	1746.1	1627.1	1597.4	1544.7	1553.9	1563.0
72.5°	15016.9	4288.6	1295.3	1693.5	1801.0	1670.5	1505.8	1457.8	1391.3	1400.6	1398.2
75°	10845.0	2915.5	942.8	1288.4	1567.6	1581.4	1386.8	1304.4	1224.4	1238.1	1242.6
77.5°	5549.6	1652.3	693.4	888.0	1231.2	1437.2	1279.2	1169.4	1151.1	1279.2	1261.0
80°	1810.2	828.4	480.6	622.5	807.8	1176.3	1121.4	995.5	990.9	1020.7	876.5
82.5°	540.1	350.1	308.9	409.6	446.3	901.7	968.0	752.9	647.6	681.9	704.9
85°	185.3	169.3	176.2	203.7	212.8	528.6	677.4	498.9	471.4	519.5	512.6
87.5°	43.5	59.4	50.3	45.8	45.8	128.1	263.2	208.3	288.3	192.2	185.3
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)