

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: P969209

Luminaire Tested: **NAV-SB5D-722-U-SL3**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P969209
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-12)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB5D-722-U-SL3
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 70 CRI, 2200K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III
SPILL LIGHT ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 42538.5 lumens
Efficiency: N/A
Efficacy: 116.6 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type IV - Medium
BUG Rating: B3 - U0 - G5

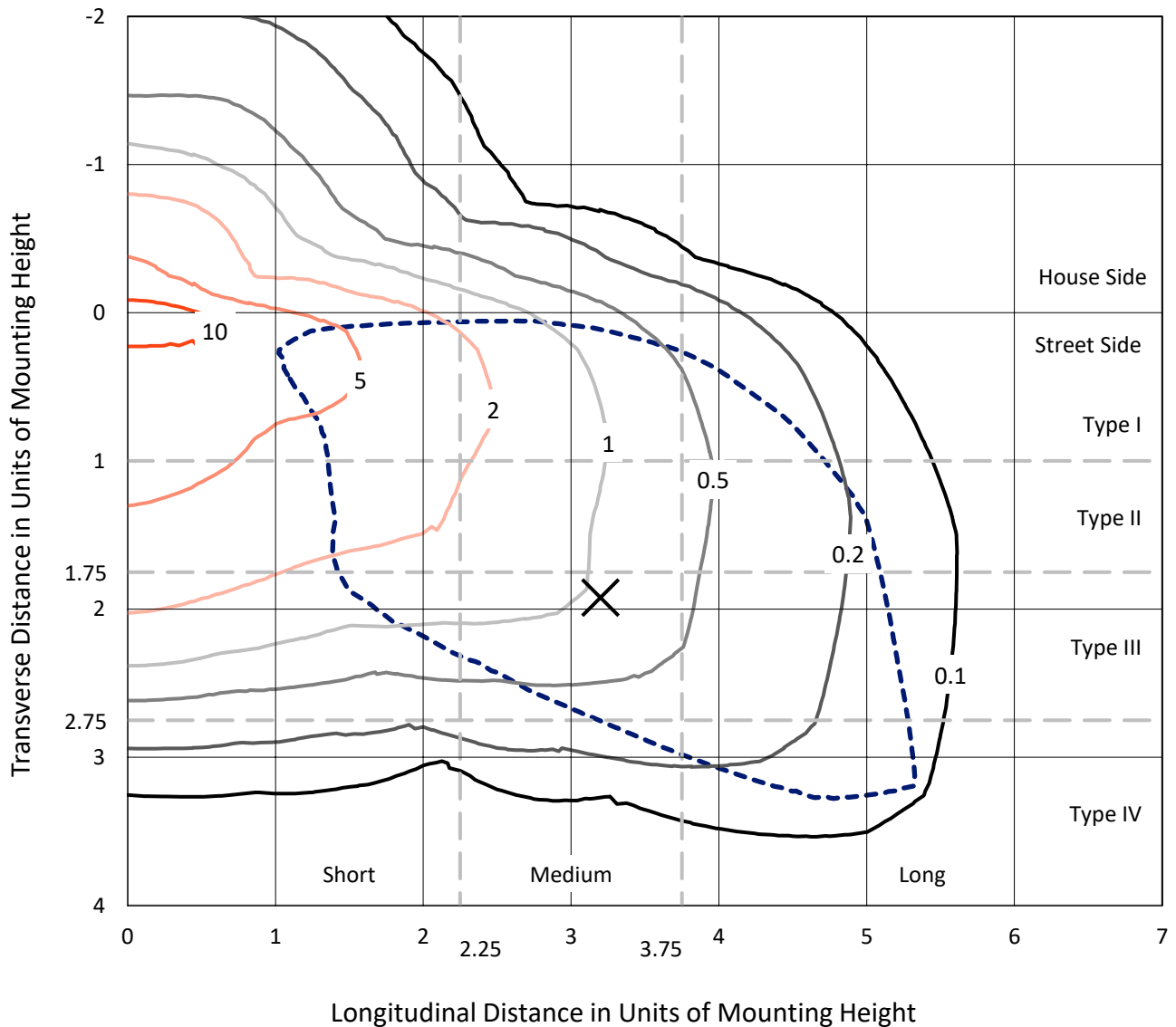
Input Watts (W): 364.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

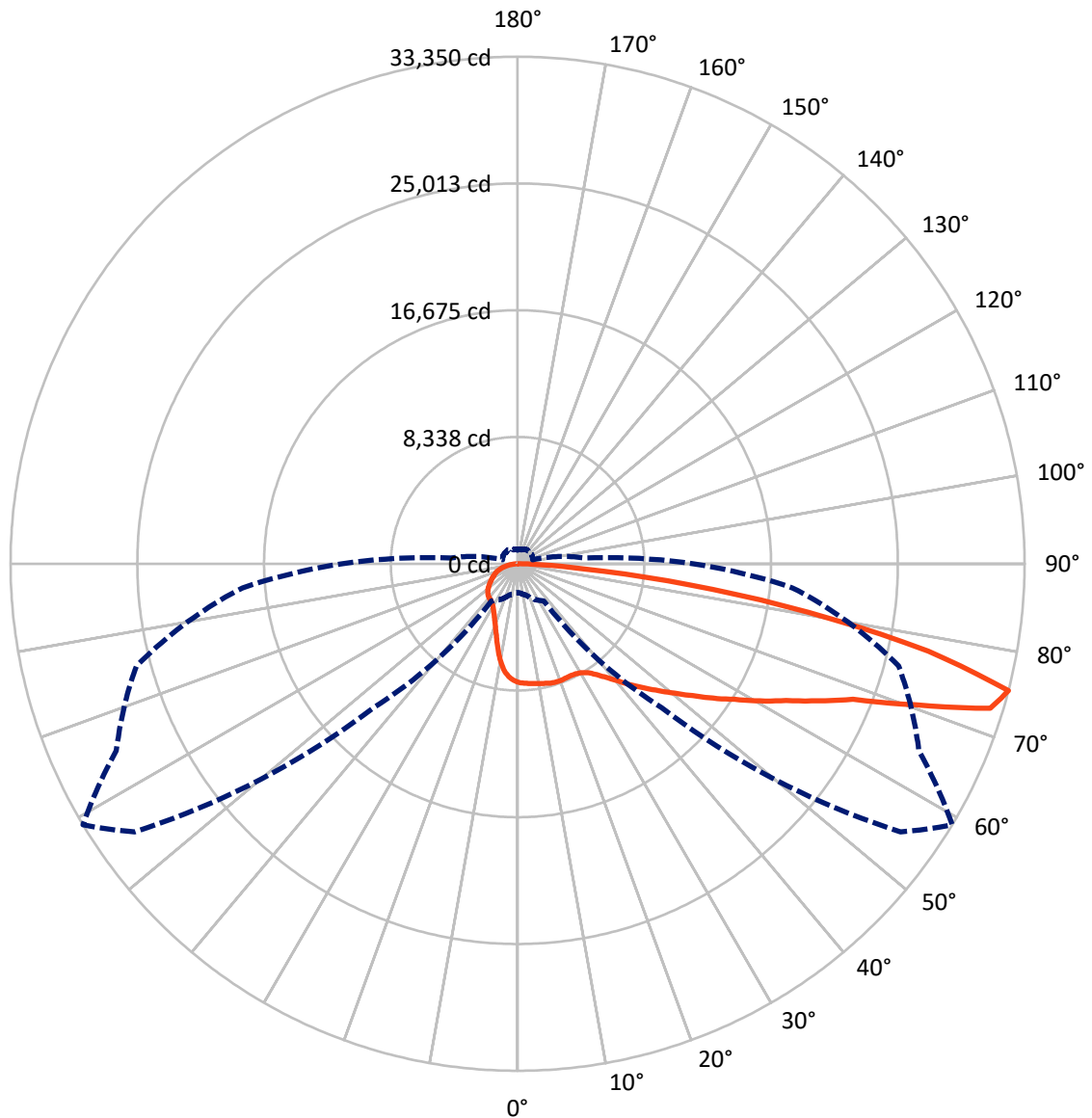
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 12.5 fc
 Type IV - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 59-Deg Lateral - - - Horizontal Cone Through 75-Deg Vertical

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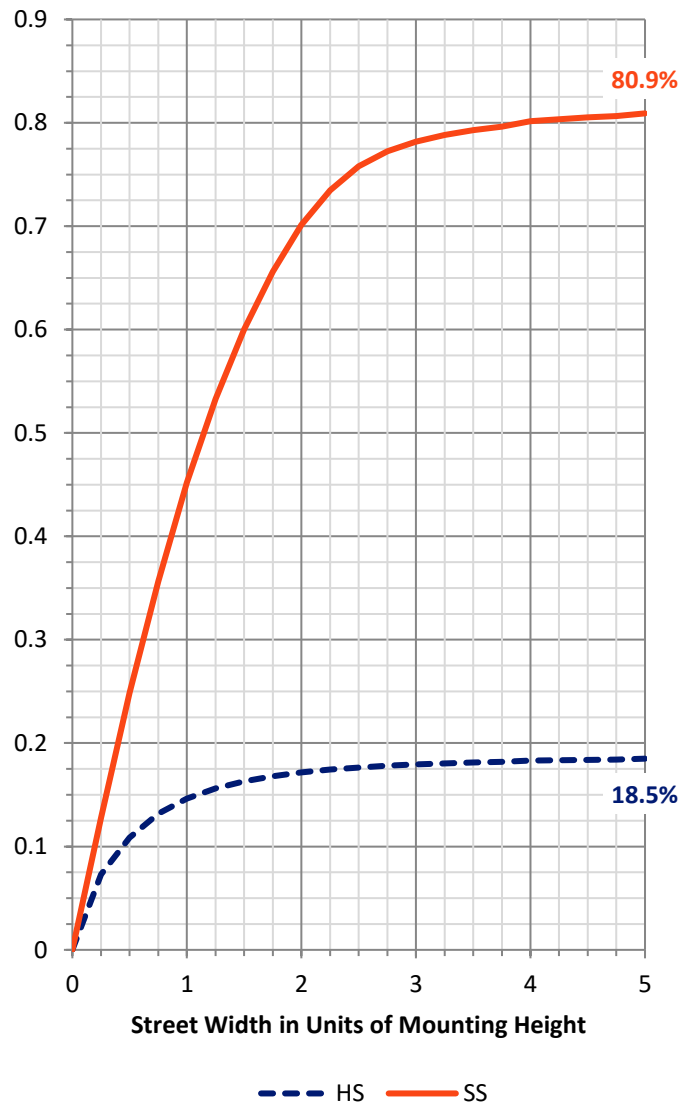
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	7978.4	0.0	7978.4
	% Fixture	18.8	0.0	18.8
Street Side	Lumens	34560.1	0.0	34560.1
	% Fixture	81.2	0.0	81.2
Total	Lumens	42538.5	0.0	42538.5
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	700.1	1.6
10°-20°	1789.5	4.2
20°-30°	2718.1	6.4
30°-40°	4040.4	9.5
40°-50°	6008.8	14.1
50°-60°	8156.2	19.2
60°-70°	9957.4	23.4
70°-80°	7814.4	18.4
80°-90°	1353.6	3.2
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°	42538.5	100.0
0°-180°	42538.5	100.0

Coefficient of Utilization

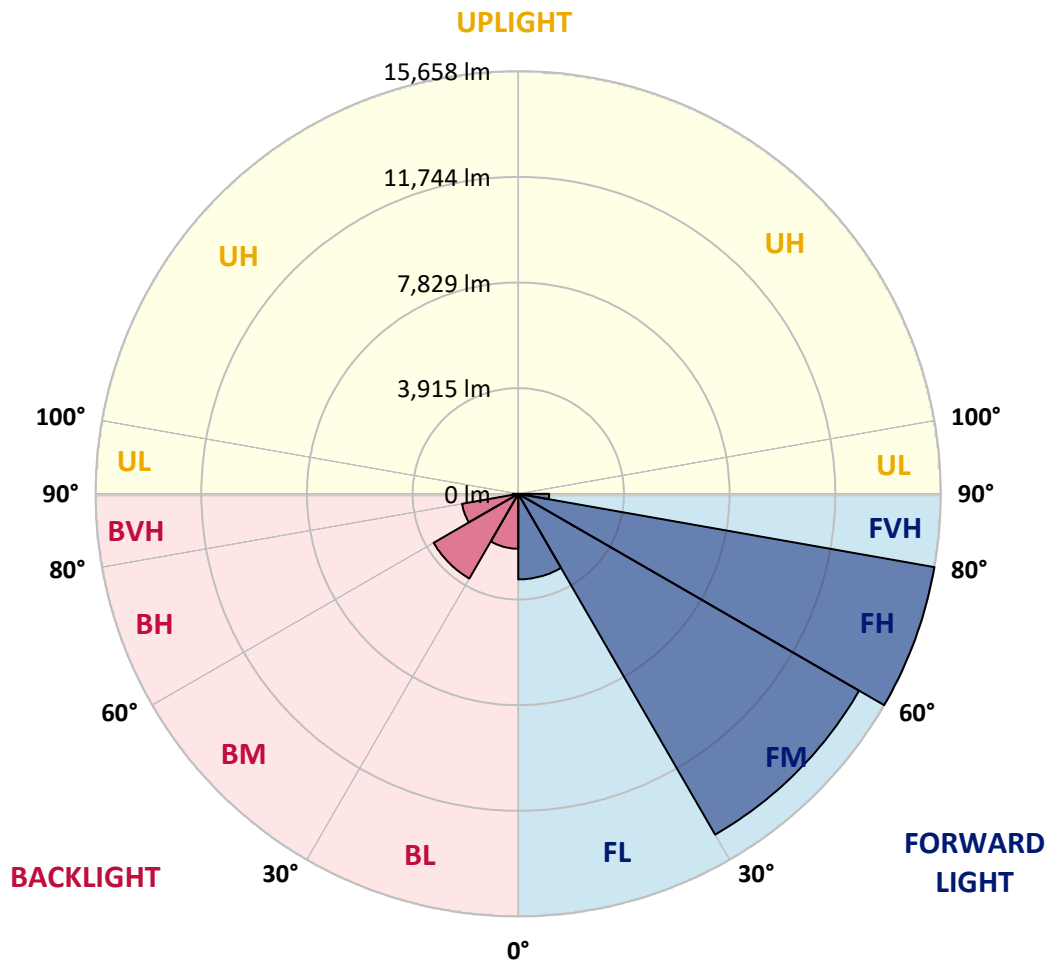


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	3171.7	7.5			
FM (30°-60°)	14584.0	34.3			
FH (60°-80°)	15658.0	36.8			G5
FVH (80°-90°)	1146.4	2.7			G5
BL (0°-30°)	2036.0	4.8	B3/2500		
BM (30°-60°)	3621.4	8.5	B3/5000		
BH (60°-80°)	2113.8	5.0	B3/2500		G3/2500
BVH (80°-90°)	207.2	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-G5
 Type IV Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	59°	65°	75°	85°
0°	7807.8	7807.8	7807.8	7807.8	7807.8	7807.8	7807.8	7807.8	7807.8	7807.8	7807.8
2.5°	7874.3	7846.8	7874.3	7862.8	7858.2	7849.0	7851.3	7867.4	7858.2	7869.6	7830.7
5°	7821.6	7805.6	7833.0	7826.2	7855.9	7860.5	7890.2	7908.5	7920.0	7922.2	7892.5
7.5°	7734.6	7718.6	7757.5	7789.6	7853.7	7871.9	7933.7	7963.4	7979.5	8006.9	7963.4
10°	7416.6	7409.7	7505.8	7627.0	7778.1	7871.9	7965.8	8016.1	8041.2	8114.5	8064.2
12.5°	6853.6	6862.8	6988.7	7222.0	7524.1	7826.2	8002.4	8075.6	8114.5	8206.0	8183.2
15°	6315.8	6313.6	6450.8	6700.3	7123.6	7624.8	8020.6	8146.5	8212.9	8347.9	8329.6
17.5°	6004.7	5995.4	6091.6	6281.5	6675.1	7315.8	7974.9	8185.4	8327.3	8496.6	8480.6
20°	5947.5	5929.1	5979.4	6073.3	6352.4	6977.2	7855.9	8185.4	8418.8	8638.5	8629.4
22.5°	6155.6	6125.9	6105.3	6093.8	6217.4	6698.0	7720.9	8158.0	8553.8	8842.2	8826.2
25°	6574.5	6528.6	6423.4	6320.5	6283.8	6572.1	7601.9	8151.1	8755.2	9116.8	9057.3
27.5°	7251.8	7194.6	6981.8	6734.7	6512.6	6636.3	7549.2	8192.3	8977.2	9407.4	9288.4
30°	8091.7	8029.8	7762.1	7382.3	6984.0	6874.2	7615.6	8313.6	9261.0	9794.2	9560.7
32.5°	8844.5	8775.8	8547.0	8160.2	7622.5	7286.1	7826.2	8544.7	9707.2	10331.9	9970.4
35°	9512.7	9432.6	9226.6	8869.6	8405.1	7865.0	8206.0	8954.3	10341.0	11206.0	10526.4
37.5°	10167.2	10073.3	9849.0	9471.5	9146.6	8636.2	8730.0	9480.6	11183.2	12267.8	11263.2
40°	10899.4	10764.4	10492.1	10119.1	9803.3	9540.1	9418.8	10126.0	12039.0	13453.2	12183.2
42.5°	11608.8	11480.6	11155.7	10837.6	10441.8	10366.2	10217.5	10881.1	12975.0	14755.3	13116.8
45°	12373.1	12219.7	11826.2	11423.4	11174.0	10915.4	10991.0	11636.3	13892.5	16082.6	14096.2
47.5°	13089.4	12917.8	12453.2	12004.7	11867.3	11377.7	11700.4	12467.0	14846.8	17428.1	15066.5
50°	13476.1	13306.8	12920.0	12514.9	12407.4	11947.5	12469.2	13379.9	15846.8	18769.1	15997.9
52.5°	13798.8	13615.7	13110.0	12885.7	12853.7	12567.6	13416.6	14423.5	16846.8	19954.4	16897.2
55°	14142.0	13938.4	13293.0	13091.6	13238.1	13263.3	14540.1	15606.5	17904.1	21110.1	17746.1
57.5°	14537.9	14279.3	13469.2	13265.6	13613.4	14078.0	15830.8	16833.1	18942.9	22181.0	18501.4
60°	14910.9	14650.0	13807.9	13542.5	14018.4	15023.0	17311.3	18318.3	20119.2	23135.2	19215.3
62.5°	14984.2	14769.0	14078.0	14075.6	14567.6	16126.0	19064.3	19817.1	21146.7	24078.1	19856.0
65°	13716.3	13581.4	13171.8	14055.0	15354.8	17714.2	21016.2	21734.7	22453.3	24901.9	20418.9
67.5°	10439.4	10457.8	10428.0	12132.8	14718.7	19995.6	23842.3	23787.4	24066.6	25826.3	21066.5
70°	4773.5	4881.0	5581.3	8375.4	11791.9	20258.7	28515.1	27803.4	26091.8	27023.1	21627.2
72.5°	2579.0	2661.3	2947.4	4057.3	7089.3	18011.6	32007.2	32512.9	28785.2	27828.6	21011.7
75°	1892.5	1938.3	2137.3	2579.0	2977.1	13386.8	30755.4	33350.4	29121.6	25949.9	18144.3
77.5°	1416.4	1437.0	1599.5	2043.5	1524.1	7057.2	24574.6	27620.4	24929.3	21320.5	13402.9
80°	1027.5	1050.3	1171.7	1533.2	1068.7	2581.3	16874.3	19387.0	17073.4	13590.5	6679.7
82.5°	709.4	718.5	771.2	1043.4	746.0	1002.3	9574.4	11368.5	9531.0	4768.9	1803.2
85°	427.9	439.3	462.3	608.7	423.3	476.0	4132.8	4274.7	2849.0	1139.6	560.7
87.5°	176.2	187.7	205.9	256.2	167.1	132.7	681.9	855.9	533.2	334.2	173.9
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°	7807.8	7807.8	7807.8	7807.8	7807.8	7807.8	7807.8	7807.8	7807.8	7807.8	7807.8
2.5°	7819.3	7803.3	7759.8	7700.3	7645.4	7576.7	7547.0	7521.8	7498.9	7455.4	7434.8
5°	7867.4	7823.8	7707.2	7556.1	7384.5	7196.8	7013.8	6887.9	6780.4	6700.3	6633.9
7.5°	7940.6	7858.2	7645.4	7336.4	6942.8	6540.1	6176.2	5917.6	5723.2	5652.3	5528.6
10°	8016.1	7917.7	7547.0	7002.4	6322.7	5702.6	5219.7	4954.2	4798.6	4748.3	4670.5
12.5°	8105.3	7961.2	7393.6	6537.9	5629.3	4949.7	4528.7	4373.1	4292.9	4265.4	4272.3
15°	8235.8	7997.8	7162.5	5956.6	4968.0	4400.5	4128.2	4020.7	3979.5	3977.1	3986.3
17.5°	8334.2	8004.6	6803.2	5334.1	4460.0	4068.7	3844.5	3803.3	3830.7	3871.9	3887.9
20°	8444.1	7942.8	6331.8	4766.7	4103.0	3778.0	3684.3	3711.7	3778.0	3837.6	3858.2
22.5°	8521.8	7830.7	5762.0	4325.0	3794.0	3611.0	3606.5	3663.7	3700.2	3730.0	3746.1
25°	8590.4	7640.8	5157.9	3954.2	3540.0	3510.3	3560.6	3542.4	3517.2	3542.4	3558.4
27.5°	8640.9	7341.0	4617.9	3629.3	3361.6	3441.6	3411.9	3370.7	3368.5	3382.2	3405.0
30°	8624.8	6940.6	4173.9	3320.4	3235.7	3313.5	3242.6	3235.7	3228.9	3235.7	3260.9
32.5°	8624.8	6485.2	3833.0	3107.6	3155.7	3125.8	3119.0	3103.0	3075.5	3073.3	3103.0
35°	8672.8	6029.8	3540.0	2993.2	3089.2	3018.3	3022.9	2984.0	2926.8	2899.3	2926.8
37.5°	8771.2	5663.6	3249.5	2938.3	2972.6	2970.2	2952.0	2885.6	2784.9	2698.0	2727.7
40°	9009.2	5556.1	3050.4	2913.0	2917.7	2945.1	2897.1	2768.9	2540.1	2398.2	2416.5
42.5°	9382.2	5736.9	3006.9	2851.2	2881.1	2908.5	2814.6	2517.2	2354.7	2270.1	2270.1
45°	9855.9	6052.7	3100.7	2762.1	2794.0	2842.1	2562.9	2421.0	2347.9	2350.1	2361.6
47.5°	10455.5	6384.5	3274.7	2684.3	2668.2	2695.6	2395.9	2308.9	2208.3	2233.5	2297.5
50°	11148.8	6720.9	3439.4	2579.0	2528.7	2439.4	2288.3	2206.0	2077.8	2018.3	2034.3
52.5°	11899.4	7045.8	3505.7	2450.8	2377.6	2274.6	2215.1	2114.5	1958.9	1860.5	1858.1
55°	12611.1	7341.0	3432.5	2297.5	2226.6	2146.5	2137.3	2075.5	1908.4	1771.2	1771.2
57.5°	13283.9	7588.2	3249.5	2141.9	2073.3	2025.2	2087.0	2057.3	1846.7	1670.5	1661.3
60°	13853.7	7757.5	2984.0	1984.0	1935.9	1910.8	2004.6	1995.5	1759.7	1562.9	1556.1
62.5°	14306.7	7823.8	2691.1	1833.0	1821.5	1775.7	1890.2	1890.2	1649.9	1457.7	1450.8
65°	14661.5	7759.8	2393.6	1684.2	1707.1	1638.5	1750.6	1736.9	1533.2	1363.9	1354.7
67.5°	14974.9	7549.2	2064.0	1537.8	1590.4	1503.5	1604.1	1572.1	1405.1	1270.1	1260.9
70°	15114.5	7059.6	1688.8	1391.3	1455.4	1370.7	1457.7	1398.2	1260.9	1169.3	1151.1
72.5°	13993.3	5867.3	1329.5	1238.0	1292.9	1224.3	1299.8	1231.1	1105.3	1064.1	1029.7
75°	11576.8	4402.8	1022.8	1070.9	1112.1	1059.5	1109.9	1059.5	945.0	974.9	890.2
77.5°	8407.4	2972.6	782.6	894.7	913.1	885.6	929.1	871.9	768.9	762.0	727.6
80°	4180.8	1741.5	613.3	707.1	700.3	681.9	732.3	704.8	617.9	654.5	647.6
82.5°	1210.5	746.0	446.2	496.6	482.9	487.4	524.1	537.7	805.5	798.7	816.9
85°	379.9	292.9	267.7	276.9	263.1	270.0	308.9	613.3	567.5	331.8	359.3
87.5°	98.4	100.7	66.3	70.9	73.2	86.9	98.4	373.0	178.5	116.7	123.6
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)